LBT-D705/D705CD/D705CDM/D705M

SERVICE MANUAL

AEP Model
LBT-D705/D705M
E Model
UK Model
LBT-D705CD
Australian Model
LBT-D705M
E Model
LBT-D705CDM

These systems are composed of following models.
As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENT MODEL NAME FOR THESE SYSTEM

	LBT-D705	LBT-D705CD		LBT-D705CDM	LBT-D705M
	AEP, G, IT	UK	E3, EA	E2	AEP, AUS
AMPLIFIER	TA-D705				
CASSETTE DECK	TC-D705				
TUNER	ST-D705				
GRAPHIC EQUALIZER	SEQ-D705				
CD PLAYER	CDP-M42			—	—
CD CHANGER	CDP-C312M	—	—	CDP-C312M	
TURNTABLE SYSTEM	PS-D705	PS-705P	PS-D705	PS-D705P	PS-D705
SPEAKER SYSTEM	SS-A705	SS-A705	SS-D705AV	SS-D705AV	SS-A705

Note:
WG: West Germany model
IT: Italian model
EA: Saudi Arabia model
AUS: Australian model

STEREO COMPONENT SYSTEM

SONY®

PARTS LIST

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-465-752-11	REMOTE COMMANDER (Include ※1) (RM-S705)
1-501-369-11	ANTENNA (AEP, UK, IT)
1-501-374-11	ANTENNA, LOOP
1-556-650-00	CORD, SPEAKER (E, EA, AUS)
1-574-265-11	CORD (WITH CONNECTOR) (3-3)
1-590-822-11	CORD (WITH CONNECTOR) (3-15-15)
1-590-823-11	CORD (WITH CONNECTOR) (3-11-11)
1-590-850-11	CORD (WITH CONNECTOR) (3-3-3)
1-559-533-11	CORD, CONNECTION (E, EA)

※1. 3-707-584-01 COVER BATTERY

Part No.	Description
* 4-934-859-01	CUSHION (TA)
* 3-350-154-01	CUSHION (TC)
* 4-944-040-01	CUSHION (CDP-C312M: FRONT)
* 4-944-041-01	CUSHION (CDP-C312M: REAR)
* 4-922-998-01	CUSHION (CDP-M42: AEP, AUS)
* 4-929-563-01	CUSHION (CDP-M42: E, EA)
* 4-929-563-01	CUSHION (ST)
* 4-944-749-01	CUSHION (PS-D705: FRONT)
* 4-944-750-01	CUSHION (PS-D705: REAR)

Part No.	Description
3-753-326-11	MANUAL, INSTRUCTION (ENGLISH, F, E, P) (AEP Model)
3-753-326-41	MANUAL, INSTRUCTION (D, NL, S, I) (AEP, G, IT Model)
3-753-326-51	MANUAL, INSTRUCTION (ENGLISH) (UK Model)
3-753-326-61	MANUAL, INSTRUCTION (ENGLISH, F, E, RC) (E3, EA, AUS Model)
3-753-326-71	MANUAL, INSTRUCTION (ENGLISH, F, E, RC) (E2)

F : FRENCH
D : GERMAN
I : ITALIAN
NL: DUTCH (HOLLAND)
P : PORTUGUESE
E : SPANISH
S : SWEDISH
RC: CHINESE

Part No.	Description
* 4-945-447-01	INDIVIDUAL CARTON (D705: AEP) (L505 W425 H392)
* 4-945-454-01	INDIVIDUAL CARTON (D705: AEP, G, IT) (L425 W386 H392)
* 4-945-448-01	INDIVIDUAL CARTON (D705CD: E3) (L758 W425 H392)
* 4-945-450-01	INDIVIDUAL CARTON (D705CD: E3, EA) (L505 W432 H520)
* 4-945-451-01	INDIVIDUAL CARTON (D705M: AEP) (L505 W425 H392)
* 4-945-452-01	INDIVIDUAL CARTON (D705M: AU) (L626 W425 H392)
* 4-945-453-01	INDIVIDUAL CARTON (D705M: AEP) (L425 W386 H392)
* 4-945-449-01	INDIVIDUAL CARTON (D705CDM: E2) (L626 W435 H565)

Sony Corporation
Audio Group

English
91D0969-1
Printed in Japan
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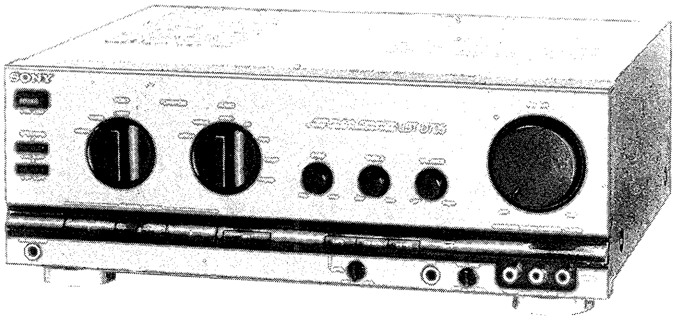
Published by Customer Relations and Service Group

TA-D705

SERVICE MANUAL

E Model
Australian Model



SPECIFICATIONS

Continuous RMS power output
70 W + 70 W
(6 ohms, at 1 kHz, 5% THD)
60 W + 60 W
(6 ohms, DIN, 1 kHz)
Music power output 100 W + 100 W
(6 ohms, at 1 kHz, 10% THD)

Input	Jack type	Sensitivity	Impedance
PHONO (MM)	Phono	2.5 mV	47 kohms
VIDEO1/DAT	Phono	200 mV	47 kohms
VIDEO2	Phono	200 mV	47 kohms
VEDEO3	Phono	200 mV	47 kohms
CD	Phono	200 mV	47 kohms
EQUALIZER	Phono	200 mV	47 kohms
MIC	Phone	1 mV	10 kohms

Output	Jack type	Voltage	Impedance
VIDEO1/DAT	Phono	180 mV	2 kohms
VIDEO 2	Phono	180 mV	2 kohms
EQUALIZER	Phono	180 mV	2 kohms
SURROUND SPEAKER	Phono	Accepts speakers of 16 ohms	
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more	

Frequency response	10 Hz to 50 kHz $^{+0}_{-3}$ dB
Power requirements	120V/220V/240V AC,50/60Hz
Power consumption	190W
AC outlet	1 unswitched, 100W max.
Weight	Approx. 6.6kg(14 lbs 9 oz)
Dimensions	Approx. 355 × 132.5 × 320 mm (w/h/d, including projections) (14 × 5 1/4 × 12 5/8 inches)

Design and specifications subject to change without notice.

Note
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

使用時は添付資料も参照のこと
Refer to the additional documents.

STEREO AMPLIFIER

SONY®

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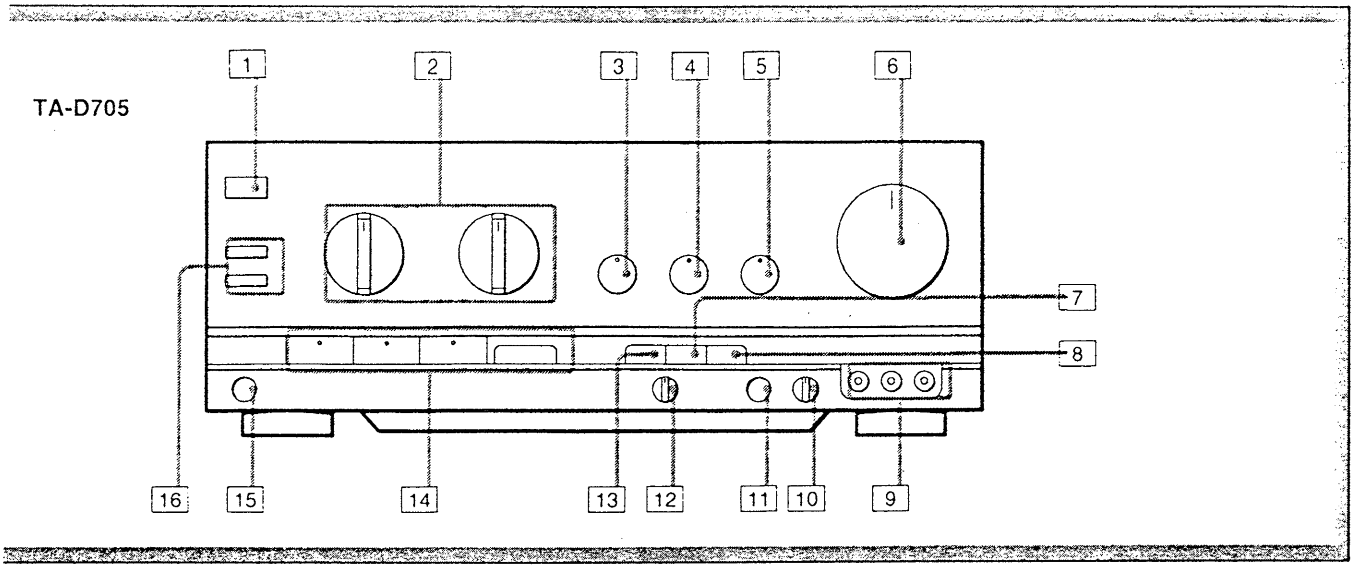
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

This section is extracted from instruction manual.



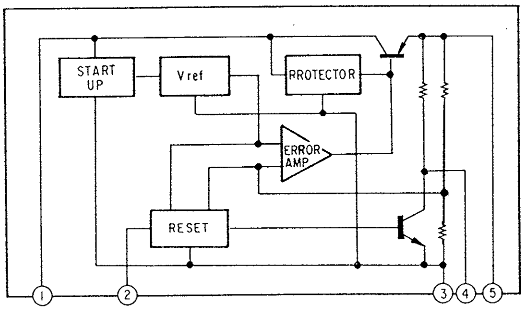
Amplifier

1 POWER switch ⑩
2 FUNCTION selectors and indicators
VIDEO source selector
AUDIO source slelctor
When the video source is selected, the ausio source is selected at the same time.
To select the ausio source separately, set the video source first.
3 BASS control ⑫
4 TREBLE control ⑫
5 BALANCE control ⑫
6 VOLUME control and indicator ⑫
7 CD DIRECT and indicator ⑭
8 EQ REC button and indicator ㊱
9 VIDEO 3 input jacks ⑨
10 MIC (microphone) LEVEL control (58)
11 MIC (microphone) jack (58)
12 DBFB LEVEL control ⑫
13 DBFB button and indicator ⑫
14 Buttons for storing (104) (E3,Saudi Arabia model only)
15 HEADPHONES jack
16 SPEAKERS selectors ⑫

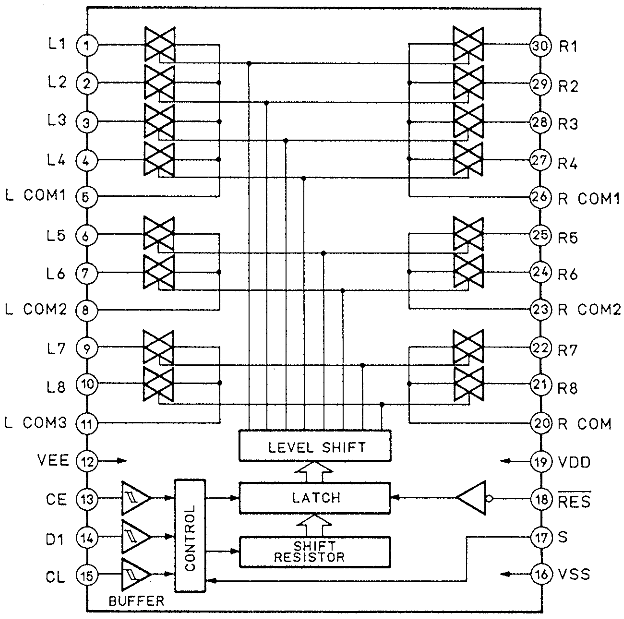
SECTION 2
DIAGRAMS

2-1. IC Block Diagrams

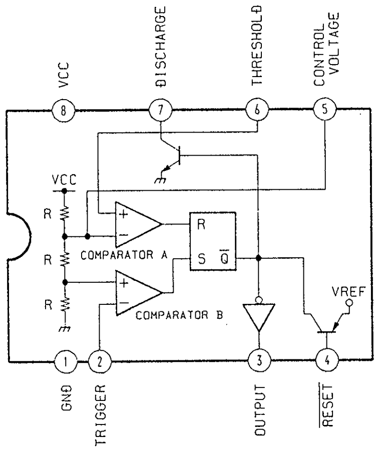
IC903 L78MR06


START UP
Vref
RROTECTOR
ERROR AMP
RESET
1
2
3
4
5

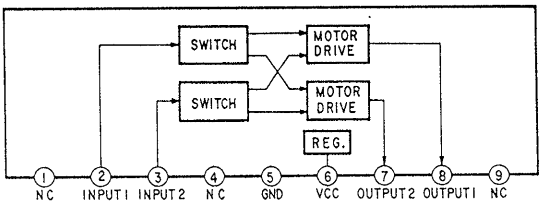
IC102 LC7821


L1
L2
L3
L4
L COM1
L5
L6
L COM2
L7
L8
L COM3
VEE
CE
D1
CL
BUFFER
CONTROL
LEVEL SHIFT
LATCH
SHIFT RESISTOR
R1
R2
R3
R4
R COM1
R5
R6
R COM2
R7
R8
R COM
VDD
RES
S
VSS
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

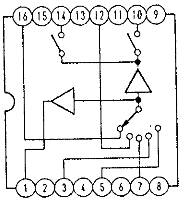
IC706 NE555P


VCC
DISCHARGE
THRESHOLD
CONTROL VOLTAGE
8
7
6
5
VCC
R
R
R
COMPARATOR A
COMPARATOR B
R
S
Q
VREF
1
2
3
4
GND
TRIGGER
OUTPUT
RESET

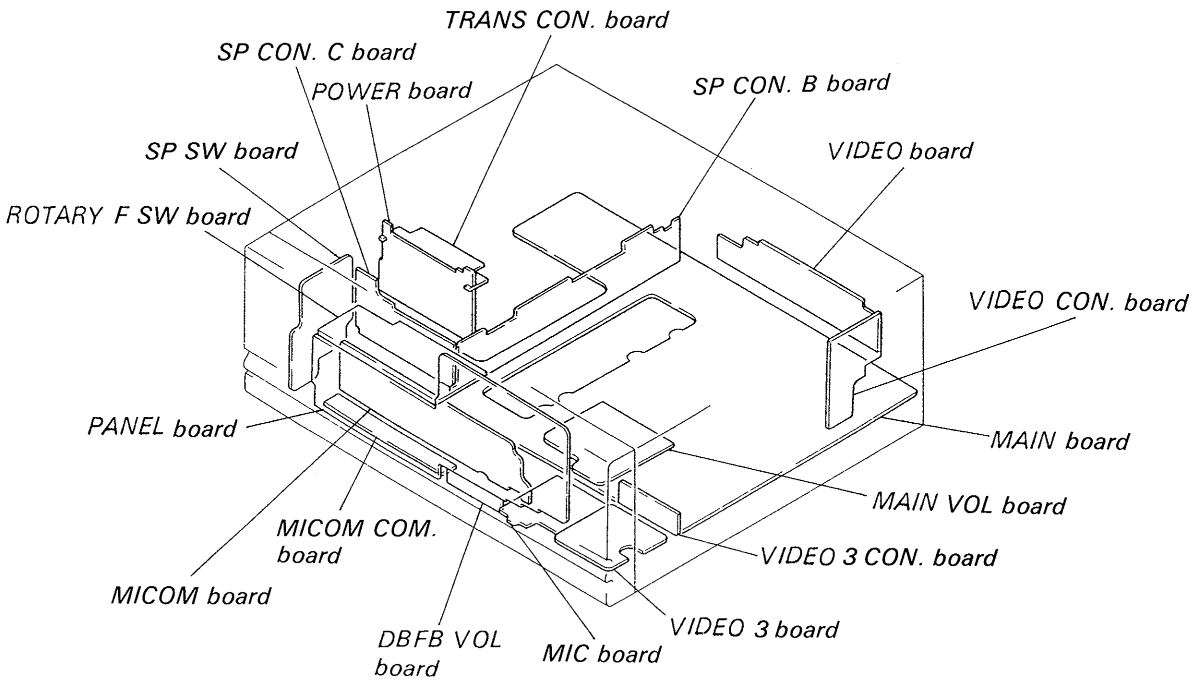
IC702, 703 BA6208


SWITCH
SWITCH
MOTOR DRIVE
MOTOR DRIVE
REG.
1
2
3
4
5
6
7
8
9
NC
INPUT1
INPUT2
NC
GND
VCC
OUTPUT2
OUTPUT1
NC

IC401 BA7625

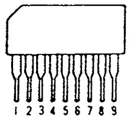

16
15
14
13
12
11
10
9
1
2
3
4
5
6
7
8

2-2. CIRCUIT BOARDS LOCATION

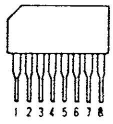

TRANS CON. board
SP CON. C board
POWER board
SP CON. B board
SP SW board
VIDEO board
ROTARY F SW board
VIDEO CON. board
PANEL board
MAIN board
MAIN VOL board
MICOM COM. board
VIDEO 3 CON. board
MICOM board
VIDEO 3 board
DBFB VOL board
MIC board

- **Semiconductor Lead Layout**

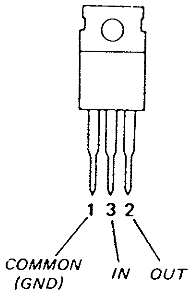
BA6208



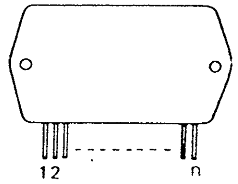
M5218AL
NJM4580L
μPC1237HA



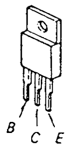
M5F7910L


1 3 2
COMMON (GND)
IN
OUT

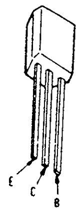
STK4182MK2



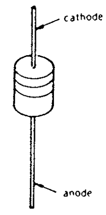
2SB1094-L



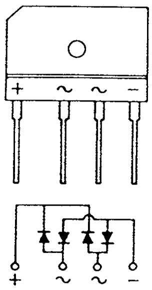
2SC2603-EF
2SC3622A-LK
DTA124ES
DTC124ES



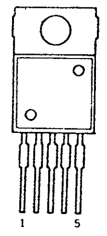
11ES2
1SS120
UZL-33H
UZL-7M1
UZP-6.8BC


cathode
anode

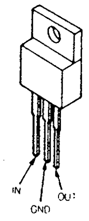
RBV-602-01



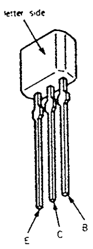
L78MR06



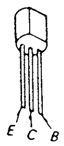
M5F7810L



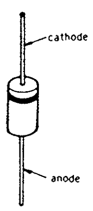
2SA1175-HFE


letter side
E
C
B

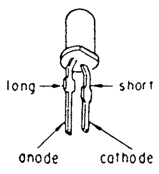
2SC1841-PAFAEA



10E2N
1S1585


cathode
anode

SEL2210S-CD


long
short
anode
cathode

PIN DESCRIPTION

・IC701(μPD75106CW) for system controller

Pin No.	Port	I／O	Nomal	Description
1	P13	I		VIF encode (INT3)
2	P12	I		AUF encode (INT2)
3	P11	I		Pulse timing (INT1)
4	P10	I		AUBUS Input (INT0)
5	PTH03	I		N.C (7 PIN)
6	PTH02	I		N.C (7 PIN)
7	PTH01	I		Relay Input
8	PTH00	I		Volume position
9	T10	I		N.C (GND)
10	T00	I		N.C (GND)
11	P23	O	L	AUBUS Output
12	P22	O	L	N.C
13	P21	O	L	N.C
14	P20	O	L	N.C
15	P03	I		Decision of destination.
16	P02	I		VIF location pulse
17	P01	I		AUF location pulse
18	P00	I		AC cut
19	P123	O	L	Mute
20	P122	O	L	Video mute
21	P121	O	L	N.C
22	P120	O	L	CD DIRECT ON/OFF
23	P133	O	L	Video Input control B
24	P132	O	L	Video Input control A
25	P131	O	L	Video REC control 1
26	P130	O	L	Video REC control 0
27	P143	O	H	EQ REC ON/OFF
28	P142	O	L	LC7821 CE
29	P141	O	L	LC7821 DI
30	P140	O	L	LC7821 CL
31	NC			N.C
32	VDD			Power supply
33	P33	O	H	AUF button LED
34	P32	I		CD DIRECT Key matrix Input
35	P31	I		EQ REC Key matrix Input
36	P30	I		DBFB Key matrix input
37	P43	I		PRESET 1 Key matrix Input
38	P42	I		PRESET 2 Key matrix Input
39	P41	I		PRESET 3 Key matrix Input
40	P40	I		SET Key matrix Input
41	P53	O	L	AU motor SW4051 3
42	P52	O	L	AU motor SW4051 2
43	P51	O	L	AU motor SW4051 1
44	P50	O	L	AU motor SW4051 0
45	$\overline{\text{RESET}}$	I	H	Used to reset
46	X2			Cristal oscillator
47	X1			Cristal oscillator
48	P63	O	L	Volume Down
49	P62	O	L	Volume Up
50	P61	O	L	VI motor SW4052 1
51	P60	O	L	VI motor SW4052 0
52	P73	O	H	VIF button LED
53	P72	O	H	PRESET 1 LED
54	P71	O	H	PRESET 2 LED
55	P70	O	H	PRESET 3 LED
56	P83	O	L	AUF Down
57	P82	O	L	AUF Up
58	P81	O	L	VIF Down
59	P80	O	L	VIF Up
60	P93	O	H	CD DIRECT LED
61	P92	O	H	EQ REC LED
62	P91	O	H	Volume LED
63	P90	O	H	DBFB ON/OFF & LED
64	VSS			GND potential

2-3. PRINTED WIRING BARDS

Note:
● ○—— : parts extracted from the component side.

EA : Saudi Arabia
AUS : Australian

【MAIN VOL BOARD】
【PANEL BOARD】
【ROTARY F SW BOARD】
【VIDEO3 BOARD】
【MIC BOARD】
【DBFB VOL BOARD】
【MICOM CON.BOARD】
【MICOM BOARD】
【VIDEO 3 CON.BOARD】
【SP CON.B BOARD】
【SP CON. C BOARD】
【SP SW BOARD】
【VIDEO CON.BOARD】
【VIDEO BOARD】
【MAIN BOARD】
【TRANS CON. BOARD】
【POWER BOARD】
SYSTEM CONTROL 1
SYSTEM CONTROL 2
SPEAKER
SURROUND SPEAKER
HEADPHONES
VOLTAGE SELECTOR
AC OUTLET
POWER TRANSFORMER
AC IN
IC701
IC501
IC102
VIDEO 2
VIDEO/VDP
MONITOR OUT
SPEAKERS
POWER

2-4. SCHEMATIC DIAGRAM —

[MAIN BOARD]
IC101 EQ AMP
IC103 MIC MIXING AMP
IC102 INPUT SELECT
IC104 EQ REC
IC105 V1/V2 REC
[ROTARY F SW BOARD]
IC702 MOTOR DRIVE (VIDEO)
IC703 MOTOR DRIVE (AUDIO)
IC705 POSITION DATA SCAN (AUDIO)
IC704 POSITION DATA SCAN (VIDEO)
IC108 TONE
IC109 EBFB AMP
IC106 CD DIRECT SW
IC107 EBFB SW
[DBFB VOL BOARD (1/2)]
[PANEL BOARD]
[MICOM CON. BOARD]
[VIDEO CON. BOARD]
[VIDEO BOARD]
IC401 VIDEO INPUT SELECT
[VIDEO 3 BOARD]
[VIDEO 3 CON. BOARD]
[MIC BOARD]
IC301 MIC AMP
IC701 SYSTEM CONTROLLER
IC706 OSCILLATION
[MICOM BOARD]
IC501 POWER AMP
IC601 PROTECT
[SP SW BOARD]
[SP CON. C BOARD]
[SP CON. B BOARD]
[MAIN VOL BOARD]
IC707 VOLUME MOTOR DRIVE
IC903 REG
IC901 10V REG
IC902 -10V REG
[POWER BOARD]
[TRANS CON. BOARD]
T1 POWER TRANSFORMER
S2 VOLTAGE SELECTOR
S1 POWER
AC IN
HEADPHONES
SURROUND SPEAKER
SPEAKER
SYSTEM CONTROL 1
SYSTEM CONTROL 2

- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D401	E-17	IC705	B-10
D501	E-25	IC706	G-13
D551	E-25	IC707	C-3
D601	I-25	IC901	J-20
D602	C-23	IC902	H-21
D603	D-24	IC903	I-21
D604	D-23		
D701	E-8	Q101	B-5
D702	E-6	Q102	D-5
D703	E-7	Q103	E-21
D704	E-11	Q104	D-21
D705	E-12	Q105	D-21
D706	E-14	Q106	D-21
D707	C-14	Q107	C-9
D708	C-14	Q108	C-8
D709	C-14	Q109	C-7
D710	H-22	Q110	D-6
D711	G-9	Q201	C-5
D712	B-28	Q202	D-6
D713	H-9	Q401	G-17
D714	C-2	Q402	F-17
D715	E-14	Q403	I-17
D716	H-9	Q404	J-17
D717	H-10	Q501	F-25
D718	H-9	Q551	E-25
D719	C-9	Q601	C-24
D720	E-13	Q701	H-9
D721	E-11	Q702	D-2
D722	E-11	Q703	C-9
D723	E-10	Q704	E-12
D901	K-24	Q705	E-10
D902	H-31	Q706	G-9
D903	H-32	Q707	G-10
D904	I-32	Q901	G-32
D905	I-30		
D906	I-30		
D907	H-30		
D908	H-30		
D909	J-20		
D910	J-21		
IC101	C-19		
IC102	F-21		
IC103	G-21		
IC104	C-21		
IC105	C-22		
IC106	B-8		
IC107	B-6		
IC108	C-8		
IC109	C-6		
IC301	H-4		
IC401	F-16		
IC501	G-25		
IC601	C-24		
IC701	G-11		
IC702	B-13		
IC703	B-11		
IC704	B-12		

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.

- △ : internal component.
- ▭ : nonflammable resistor.
- ∿ : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- [B+] : B+ Line
- [B−] : B– Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

- Signal path.
  ➾ : CD
  ⇨ : TV (PICTURE)

EA : Saudi Arabia
AUS : Australian

SECTION 3
EXPLODED VIEWS

NOTE:
- －XX, －X mean standardized parts, so they may have some differences from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts

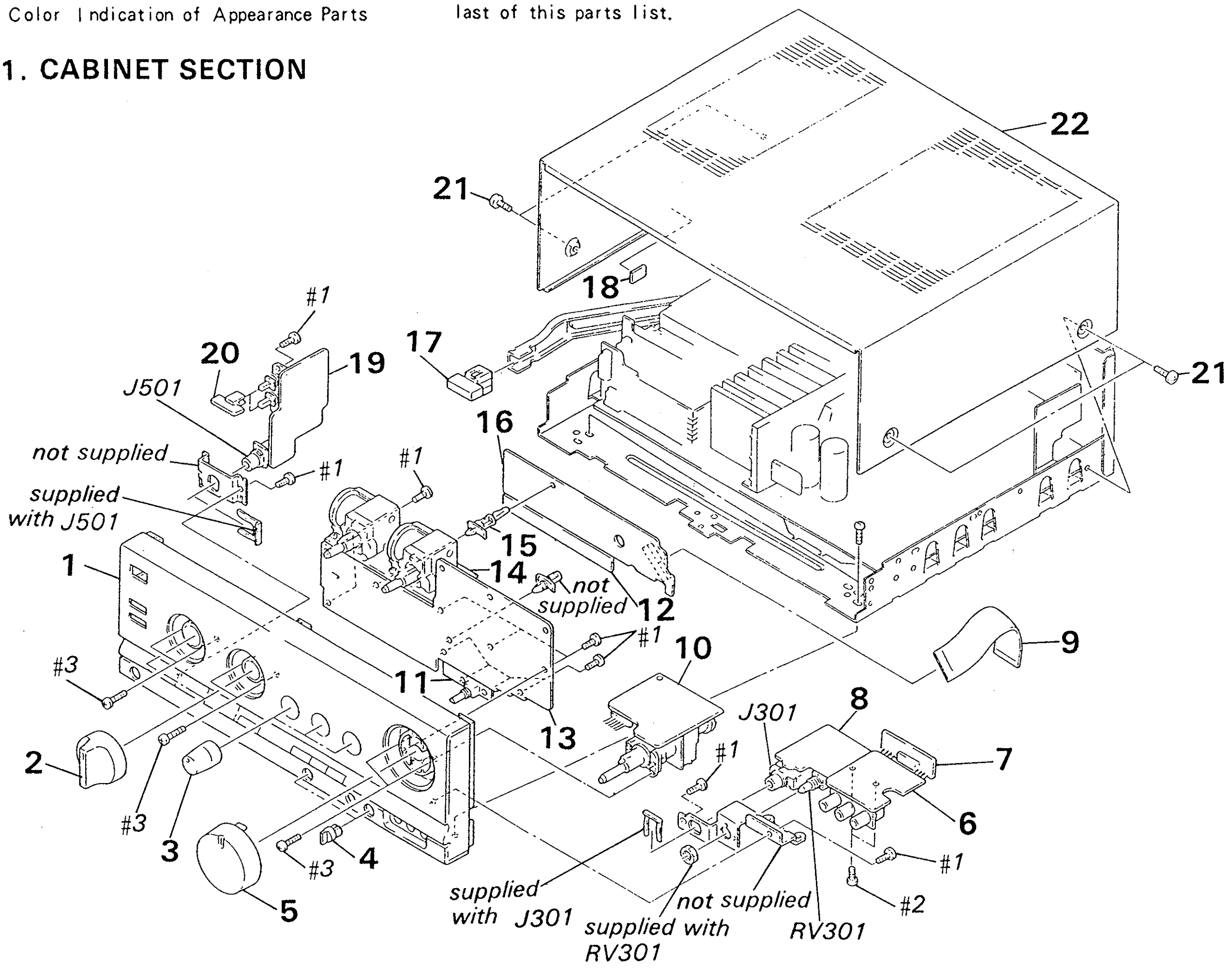
Example:
KNOB, BALANCE(WHITE)...(WHT)
↑ ↑
Part's Color Cabinet's Color

- Hardware (#mark) list is given in the last of this parts list.

EA : Saudi Arabia
AUS : Australian

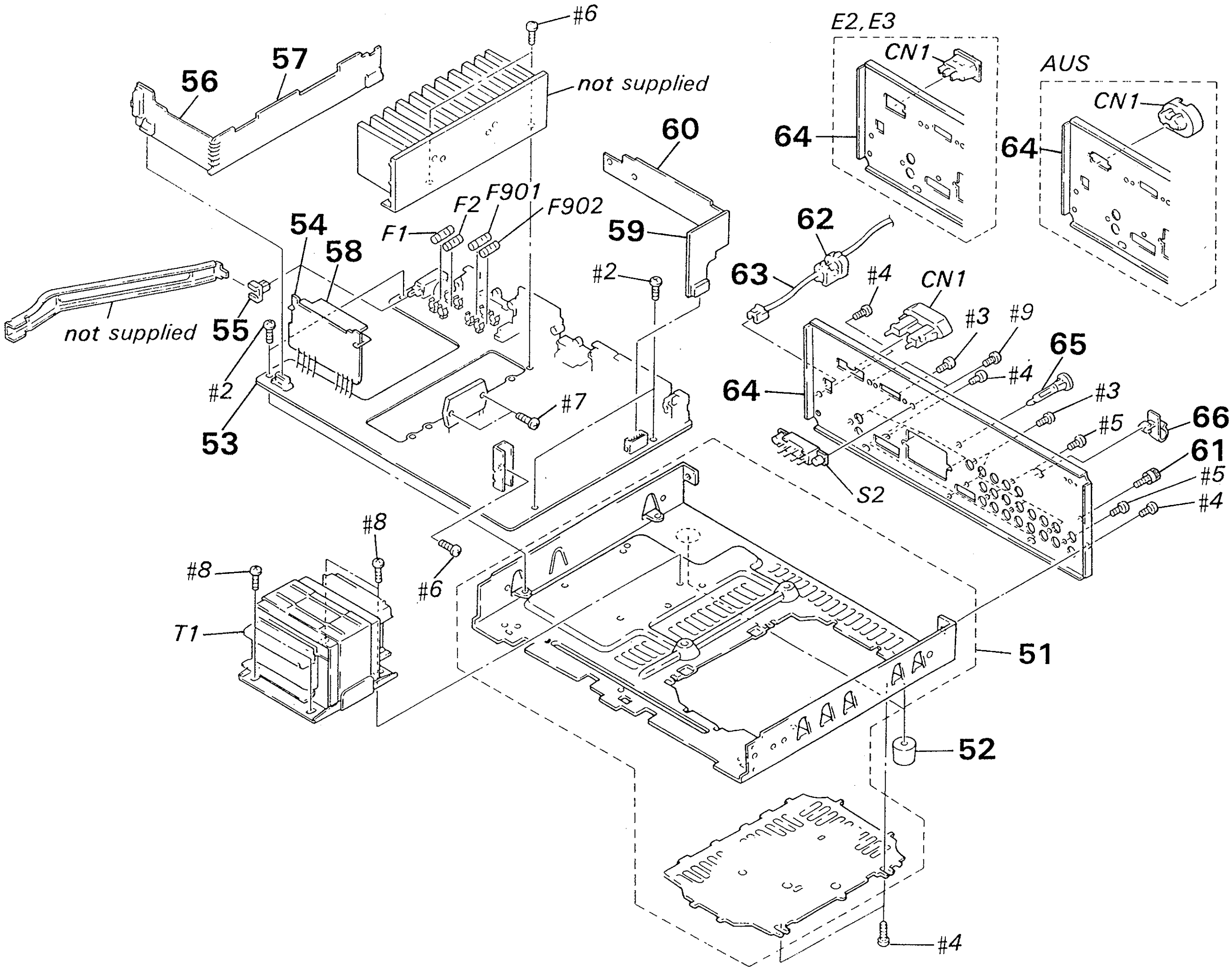
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

3-1. CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	X-4941-407-1	PANEL ASSY, FRONT (E3, EA)	
1	X-4941-408-1	PANEL (M) ASSY, FRONT (E2, AUS)	
2	X-4941-026-1	KNOB (DIA. 36) ASSY, SQUARE	
3	4-943-979-01	KNOB (DIA. 16), ROUND	
4	4-933-116-11	KNOB (C, TYPE), LOV	
5	X-4941-136-1	KNOB ASSY, ROUND	
6	1-639-090-11	VIDEO 3 BOARD	
7	1-639-091-11	VIDEO 3 CON BOARD	
8	1-639-089-11	MIC BOARD	
9	* 1-590-242-11	WIRE, FLAT TYPE (25 CORE)	
10	1-639-082-11	MAIN VOL BOARD	
11	1-639-085-11	DBFB VOL BOARD	
12	1-639-086-11	MICOM CON. BOARD	
13	* A-4341-960-A	PANEL BOARD, COMPLETE (E3, EA)	
13	* A-4341-961-A	PANEL BOARD, COMPLETE (E2, AUS)	
14	1-639-083-11	ROTARY F SW BOARD	
15	* 4-924-098-01	HOLDER, PC BOARD	
16	* A-4341-964-A	MICOM BOARD, COMPLETE (E3, EA)	
16	* A-4341-965-A	MICOM BOARD, COMPLETE (E2, AUS)	
17	4-921-919-01	BUTTON (P)	
18	* 4-911-047-01	VIBRATION CONTROL (D)	
19	1-639-088-11	SP SW BOARD	
20	4-937-308-01	BUTTON (SP)	
21	3-363-099-01	SCREW (CASE +3X8 TP2)	
22	* 4-939-803-91	CASE	
J301	1-507-849-11	JACK, LARGE TYPE (MIC)	
J501	1-507-796-21	JACK (HEADPHONES)	
RV301	1-241-317-11	RES, VAR, CARBON 50K	

3-2. MAIN BOARD SECTION


#6
57
56
not supplied
60
F2
F901
F902
F1
54
58
59
#2
not supplied
55
#2
53
#7
E2, E3
CN1
64
AUS
CN1
64
62
63
#4
CN1
#3
#9
65
#4
#3
64
#5
66
61
#5
#4
S2
#8
#8
#6
T1
51
52
#4

Ref. No.	Part No.	Description	Remark
51	* X-4917-246-1	CHASSIS ASSY	
52	4-931-169-01	FOOT	
53	* A-4341-954-A	MAIN BOARD, COMPLETE	
54	1-639-065-11	POWER BOARD	
55	4-866-342-00	JOINT (B), KNOB	
56	1-639-096-11	SP CON. (C) BOARD	
57	1-639-095-11	SP CON. (B) BOARD	
58	1-639-066-11	TRANS CON. BOARD	
59	1-639-092-11	VIDEO CON. BOARD	
60	* A-4341-972-A	VIDEO BOARD, COMPLETE	
61	3-706-165-00	SCREW	
62	* 3-703-244-02	BUSHING (S) (4516), CORD (EA, AUS)	
62	* 3-703-571-11	BUSHING (S) (4516), CORD (E2, E3)	
63	⚠ 1-575-654-11	CORD, POWER (EA)	
63	⚠ 1-575-656-11	CORD, POWER (E2, E3)	
63	⚠ 1-690-056-11	CORD, POWER (AUS)	
64	* 4-943-604-51	PANEL (B3120), BACK (E2, E3)	
64	* 4-943-604-61	PANEL (B3120), BACK (EA)	
64	* 4-943-604-71	PANEL (B3120), BACK (AUS)	
65	* 4-912-181-21	SUPPORT, PC	
66	* 2-379-614-01	HOOK	
CN1	⚠ 1-526-882-00	OUTLET, AC (E2, E3)	
CN1	⚠ 1-526-794-11	OUTLET, AC (EA)	
CN1	⚠ 1-540-196-11	OUTLET, AC (AUS)	
F1	⚠ 1-532-388-51	FUSE (T2A)	
F2	⚠ 1-532-388-51	FUSE (T2A)	
F901	⚠ 1-532-388-51	FUSE (T2A)	
F902	⚠ 1-532-388-51	FUSE (T2A)	
S2	⚠ 1-570-307-11	SWITCH, VOLTAGE CHANGE	
T1	⚠ 1-450-480-11	TRANSFORMER, POWER	

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

SECTION 4
ELECTRICAL PARTS LIST

MAIN POWER TRANS CON.

EA : Saudi Arabia
AUS : Australian

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- −XX, −X mean standardized parts, so they may have some differences from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA··· : μA···, uPA··· : μPA···,
  uPB··· : μPB···, uPC··· : μPC···,
  uPD··· : μPD···
- CAPACITORS
  uF : μF
- COILS
  uH : μH

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref. No.	Part No.	Description			Remark
	* A-4341-954-A	MAIN BOARD, COMPLETE			
		********************			
	* 1-639-065-11	POWER BOARD			
		***********			
	* 1-639-066-11	TRANS CON. BOARD			
		****************			
	* 1-533-213-31	HOLDER, FUSE			
	* 1-533-213-31	HOLDER, FUSE			
	* 4-942-204-01	PLATE, GROUND			
	7-682-548-04	SCREW +BVTT 3X8 (S)			
		< CAPACITOR >			
C1	1-161-744-00	CERAMIC	0.01uF		400V
C102	1-124-257-00	ELECT	2.2uF	20%	50V
C103	1-162-282-31	CERAMIC	100PF	10%	50V
C104	1-162-219-31	CERAMIC	68PF	5%	50V
C105	1-124-910-11	ELECT	47uF	20%	50V
C106	1-130-480-00	MYLAR	0.0056uF	5%	50V
C107	1-130-473-00	MYLAR	0.0015uF	5%	50V
C108	1-124-464-11	ELECT	0.22uF	20%	50V
C109	1-124-910-11	ELECT	47uF	20%	50V
C111	1-124-257-00	ELECT	2.2uF	20%	50V
C113	1-126-161-11	ELECT	2.2uF	20%	50V
C115	1-126-161-11	ELECT	2.2uF	20%	50V
C122	1-126-059-11	ELECT	10uF	20%	50V
C123	1-162-219-31	CERAMIC	68PF	5%	50V
C124	1-162-207-31	CERAMIC	22PF	5%	50V
C125	1-126-161-11	ELECT	2.2uF	20%	50V
C135	1-124-463-00	ELECT	0.1uF	20%	50V
C136	1-126-301-11	ELECT	1uF	20%	50V
C138	1-124-910-11	ELECT	47uF	20%	50V
C202	1-124-257-00	ELECT	2.2uF	20%	50V
C203	1-162-282-31	CERAMIC	100PF	10%	50V
C204	1-162-219-31	CERAMIC	68PF	5%	50V
C205	1-124-910-11	ELECT	47uF	20%	50V
C206	1-130-480-00	MYLAR	0.0056uF	5%	50V
C207	1-130-473-00	MYLAR	0.0015uF	5%	50V
C208	1-124-464-11	ELECT	0.22uF	20%	50V
C209	1-124-910-11	ELECT	47uF	20%	50V
C211	1-124-257-00	ELECT	2.2uF	20%	50V
C213	1-126-161-11	ELECT	2.2uF	20%	50V
C215	1-126-161-11	ELECT	2.2uF	20%	50V
C222	1-126-059-11	ELECT	10uF	20%	50V
C223	1-162-219-31	CERAMIC	68PF	5%	50V
C224	1-162-207-31	CERAMIC	22PF	5%	50V
C225	1-126-161-11	ELECT	2.2uF	20%	50V
C238	1-124-910-11	ELECT	47uF	20%	50V
C409	1-162-306-11	CERAMIC	0.01uF	20%	16V
C501	1-126-059-11	ELECT	10uF	20%	50V
C502	1-162-282-31	CERAMIC	100PF	10%	50V
C503	1-162-286-31	CERAMIC	220PF	10%	50V
C504	1-126-101-11	ELECT	100uF	20%	16V
C505	1-124-572-11	ELECT	100uF	20%	63V
C506	1-124-910-11	ELECT	47uF	20%	50V
C507	1-126-059-11	ELECT	10uF	20%	63V
C508	1-130-493-00	MYLAR	0.068uF	5%	50V
C509	1-130-493-00	MYLAR	0.068uF	5%	50V
C551	1-126-059-11	ELECT	10uF	20%	50V
C552	1-162-282-31	CERAMIC	100PF	10%	50V
C553	1-162-286-31	CERAMIC	220PF	10%	50V
C554	1-126-101-11	ELECT	100uF	20%	16V
C555	1-124-572-11	ELECT	100uF	20%	63V
C556	1-124-910-11	ELECT	47uF	20%	50V
C557	1-161-494-00	CERAMIC	0.022uF		25V
C558	1-130-493-00	MYLAR	0.068uF	5%	50V
C559	1-130-493-00	MYLAR	0.068uF	5%	50V

MAIN POWER TRANS CON.

Ref. No.	Part No.	Description	Remark
C601	1-126-101-11	ELECT 100uF 20% 16V	
C602	1-126-101-11	ELECT 100uF 20% 16V	
C603	1-126-163-11	ELECT 4.7uF 20% 50V	
C604	1-124-994-11	ELECT 100uF 20% 10V	
C901	1-126-258-11	ELECT 4700uF 20% 56V	
C902	1-126-258-11	ELECT 4700uF 20% 56V	
C905	1-124-920-11	ELECT 330uF 20% 63V	
C906	1-126-233-11	ELECT 22uF 20% 50V	
C907	1-124-122-11	ELECT 100uF 20% 50V	
C908	1-124-994-11	ELECT 100uF 20% 10V	
C909	1-126-027-11	ELECT 1000uF 20% 25V	
C910	1-126-027-11	ELECT 1000uF 20% 25V	
C911	1-124-910-11	ELECT 47uF 20% 50V	
C912	1-124-910-11	ELECT 47uF 20% 50V	
C913	1-126-023-11	ELECT 100uF 20% 16V	
C914	1-126-023-11	ELECT 100uF 20% 16V	
C915	1-124-910-11	ELECT 47uF 20% 50V	
C916	1-124-463-00	ELECT 0.1uF 20% 50V	
C917	1-130-491-00	MYLAR 0.047uF 5% 50V	
C918	1-126-059-11	ELECT 10uF 20% 50V	

< CONNECTOR >

Ref. No.	Part No.	Description	Remark
CN101	* 1-566-858-41	SOCKET, CONNECTOR 11P	
CN701	* 1-568-841-11	SOCKET, CONNECTOR 25P	
CN901	* 1-566-859-11	SOCKET, CONNECTOR 15P	
CNJ501	* 1-569-491-11	SOCKET, CONNECTOR 5P	
CNJ601	1-569-492-11	SOCKET, CONNECTOR 6P	
CNP1	* 1-564-321-00	PIN, CONNECTOR 2P	
CNP301	* 1-565-344-11	PIN, CONNECTOR (PC BOARD) 8P	
CNP401	* 1-565-344-11	PIN, CONNECTOR (PC BOARD) 8P	

< CERAMIC >

Ref. No.	Part No.	Description	Remark
CP901	1-102-394-11	CERAMIC 0.01uF 250V	
CP902	1-102-394-11	CERAMIC 0.01uF 250V	

< DIODE >

Ref. No.	Part No.	Description	Remark
D501	8-719-815-85	DIODE 1S1585	
D551	8-719-815-85	DIODE 1S1585	
D601	8-719-815-85	DIODE 1S1585	
D602	8-719-815-85	DIODE 1S1585	
D603	8-719-815-85	DIODE 1S1585	
D604	8-719-815-85	DIODE 1S1585	
D710	8-719-815-85	DIODE 1S1585	
D712	8-719-000-84	DIODE UZL-7M1	
D901	8-719-302-38	DIODE RBV-602-01	
D902	8-719-200-77	DIODE 10E2N	
D903	8-719-002-67	DIODE UZL-33H	
D904	8-719-014-88	DIODE UZP-6.8BC	
D905	8-719-200-77	DIODE 10E2N	
D906	8-719-200-77	DIODE 10E2N	
D907	8-719-200-77	DIODE 10E2N	
D908	8-719-200-77	DIODE 10E2N	
D909	8-719-200-77	DIODE 10E2N	
D910	8-719-200-77	DIODE 10E2N	

< IC >

Ref. No.	Part No.	Description	Remark
IC101	8-759-634-50	IC M5218LA	
IC102	8-759-805-13	IC LC7821	
IC103	8-759-634-50	IC M5218AL	
IC104	8-759-801-01	IC LC4066	
IC105	8-759-801-01	IC LC4066	
IC501	8-749-920-90	IC STK4201MK2	
IC601	8-759-111-68	IC uPC1237HA	
IC901	8-759-604-32	IC M5F7810L	
IC902	8-759-604-50	IC M5F7910L	
IC903	8-759-820-13	IC L78MR06	

< JACK >

Ref. No.	Part No.	Description	Remark
J101	1-565-352-11	JACK, PIN 2P (PHONO)	
J102	1-565-320-11	JACK, PIN 6P (CD EQUALIZER)	
J103	1-565-258-11	JACK, PIN 4P (VIDEO 2)	
J104	1-565-258-11	JACK, PIN 4P (VIDEO 1/DAT)	
J502	1-565-352-11	JACK, PIN 2P (SURROUND SPEAKER)	

< COIL >

Ref. No.	Part No.	Description	Remark
L501	* 1-420-872-00	COIL, AIR CORE	
L551	* 1-420-872-00	COIL, AIR CORE	

< TRANSISTOR >

Ref. No.	Part No.	Description	Remark
Q103	8-729-900-36	TRANSISTOR DTC124ES	
Q104	8-729-900-63	TRANSISTOR DTA124ES	
Q105	8-729-900-63	TRANSISTOR DTA124ES	
Q106	8-729-900-63	TRANSISTOR DTA124ES	
Q501	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q551	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q601	8-729-900-63	TRANSISTOR DTA124ES	
Q901	8-729-111-67	TRANSISTOR 2SB1094-L	

< RESISTOR >

Ref. No.	Part No.	Description	Remark
R102	1-249-441-11	CARBON 100K 5% 1/4W	
R103	1-249-417-11	CARBON 1K 5% 1/4W	
R104	1-249-441-11	CARBON 100K 5% 1/4W	
R105	1-249-416-11	CARBON 820 5% 1/4W	
R106	1-247-897-11	CARBON 560K 5% 1/4W	
R107	1-249-437-11	CARBON 47K 5% 1/4W	

MAIN POWER TRANS CON.

Ref. No.	Part No.	Description				Remark
R108	1-249-441-11	CARBON	100K	5%	1/4W	
R109	1-249-417-11	CARBON	1K	5%	1/4W	
R110	1-249-409-11	CARBON	220	5%	1/4W	
R111	1-249-417-11	CARBON	1K	5%	1/4W	
R112	1-247-903-00	CARBON	1M	5%	1/4W	
R113	1-249-417-11	CARBON	1K	5%	1/4W	
R114	1-247-903-00	CARBON	1M	5%	1/4W	
R115	1-249-417-11	CARBON	1K	5%	1/4W	
R116	1-247-903-00	CARBON	1M	5%	1/4W	
R119	1-249-413-11	CARBON	470	5%	1/4W	
R120	1-247-903-00	CARBON	1M	5%	1/4W	
R121	1-249-413-11	CARBON	470	5%	1/4W	
R122	1-247-903-00	CARBON	1M	5%	1/4W	
R123	1-249-413-11	CARBON	470	5%	1/4W	
R124	1-247-903-00	CARBON	1M	5%	1/4W	
R125	1-249-417-11	CARBON	1K	5%	1/4W	
R126	1-247-903-00	CARBON	1M	5%	1/4W	
R127	1-249-417-11	CARBON	1K	5%	1/4W	
R128	1-247-903-00	CARBON	1M	5%	1/4W	
R129	1-249-417-11	CARBON	1K	5%	1/4W	
R130	1-247-903-00	CARBON	1M	5%	1/4W	
R131	1-247-903-00	CARBON	1M	5%	1/4W	
R132	1-249-438-11	CARBON	56K	5%	1/4W	
R133	1-249-438-11	CARBON	56K	5%	1/4W	
R134	1-247-903-00	CARBON	1M	5%	1/4W	
R135	1-249-438-11	CARBON	56K	5%	1/4W	
R148	1-249-433-11	CARBON	22K	5%	1/4W	
R149	1-249-441-11	CARBON	100K	5%	1/4W	
R150	1-249-417-11	CARBON	1K	5%	1/4W	
R151	1-249-417-11	CARBON	1K	5%	1/4W	
R152	1-249-417-11	CARBON	1K	5%	1/4W	
R153	1-249-433-11	CARBON	22K	5%	1/4W	
R154	1-249-433-11	CARBON	22K	5%	1/4W	
R155	1-249-417-11	CARBON	1K	5%	1/4W	
R156	1-249-433-11	CARBON	22K	5%	1/4W	
R157	1-249-417-11	CARBON	1K	5%	1/4W	
R162	1-249-417-11	CARBON	1K	5%	1/4W	
R202	1-249-441-11	CARBON	100K	5%	1/4W	
R203	1-249-417-11	CARBON	1K	5%	1/4W	
R204	1-249-441-11	CARBON	100K	5%	1/4W	
R205	1-249-416-11	CARBON	820	5%	1/4W	
R206	1-247-897-11	CARBON	560K	5%	1/4W	
R207	1-249-437-11	CARBON	47K	5%	1/4W	
R208	1-249-441-11	CARBON	100K	5%	1/4W	
R209	1-249-417-11	CARBON	1K	5%	1/4W	
R210	1-249-409-11	CARBON	220	5%	1/4W	
R211	1-249-417-11	CARBON	1K	5%	1/4W	
R212	1-247-903-00	CARBON	1M	5%	1/4W	
R213	1-249-417-11	CARBON	1K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R214	1-247-903-00	CARBON	1M	5%	1/4W	
R215	1-249-417-11	CARBON	1K	5%	1/4W	
R216	1-247-903-00	CARBON	1M	5%	1/4W	
R219	1-249-413-11	CARBON	470	5%	1/4W	
R220	1-247-903-00	CARBON	1M	5%	1/4W	
R221	1-249-413-11	CARBON	470	5%	1/4W	
R222	1-247-903-00	CARBON	1M	5%	1/4W	
R223	1-249-413-11	CARBON	470	5%	1/4W	
R224	1-247-903-00	CARBON	1M	5%	1/4W	
R225	1-249-417-11	CARBON	1K	5%	1/4W	
R226	1-247-903-00	CARBON	1M	5%	1/4W	
R227	1-249-417-11	CARBON	1K	5%	1/4W	
R228	1-247-903-00	CARBON	1M	5%	1/4W	
R229	1-249-417-11	CARBON	1K	5%	1/4W	
R230	1-247-903-00	CARBON	1M	5%	1/4W	
R231	1-247-903-00	CARBON	1M	5%	1/4W	
R232	1-249-438-11	CARBON	56K	5%	1/4W	
R233	1-249-438-11	CARBON	56K	5%	1/4W	
R234	1-247-903-00	CARBON	1M	5%	1/4W	
R235	1-249-438-11	CARBON	56K	5%	1/4W	
R501	1-249-417-11	CARBON	1K	5%	1/4W	
R502	1-249-438-11	CARBON	56K	5%	1/4W	
R503	1-249-413-11	CARBON	470	5%	1/4W	
R504	1-249-438-11	CARBON	56K	5%	1/4W	
R505	1-247-760-11	CARBON	4.7K	5%	1/2W	
R506	1-247-760-11	CARBON	4.7K	5%	1/2W	
R507	⚠ 1-212-881-11	FUSIBLE	100	5%	1/4W	F
R508	1-247-752-11	CARBON	1K	5%	1/2W	
R509	1-247-752-11	CARBON	1K	5%	1/2W	
R510	1-249-417-11	CARBON	1K	5%	1/4W	
R511	1-249-431-11	CARBON	15K	5%	1/4W	
R512	1-217-156-00	RES, METAL PLATE	0.22			
R513	1-249-441-11	CARBON	100K	5%	1/4W	
R514	1-249-438-11	CARBON	56K	5%	1/4W	
R515	1-247-727-11	CARBON	10	5%	1/2W	
R516	1-247-727-11	CARBON	10	5%	1/2W	
R551	1-249-417-11	CARBON	1K	5%	1/4W	
R552	1-249-438-11	CARBON	56K	5%	1/4W	
R553	1-249-413-11	CARBON	470	5%	1/4W	
R554	1-249-438-11	CARBON	56K	5%	1/4W	
R555	1-247-760-11	CARBON	4.7K	5%	1/2W	
R556	1-247-760-11	CARBON	4.7K	5%	1/2W	
R557	⚠ 1-212-881-11	FUSIBLE	100	5%	1/4W	F
R560	1-249-417-11	CARBON	1K	5%	1/4W	
R561	1-249-431-11	CARBON	15K	5%	1/4W	
R562	1-217-156-00	RES, METAL PLATE	0.22			
R563	1-249-441-11	CARBON	100K	5%	1/4W	
R564	1-249-437-11	CARBON	47K	5%	1/4W	
R565	1-247-727-11	CARBON	10	5%	1/2W	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

MAIN **POWER** **TRANS CON.** **PANEL** **MICOM** **VIDEO**
MAIN VOL **ROTARY F SW** **DBFB VOL** **MICOM CON.**
SP SW **MIC** **VIDEO 3** **VIDEO 3 CON.** **VIDEO CON.**
SP CON. (B) **SP CON. (C)**

Ref. No.	Part No.	Description				Remark
R566	1-247-727-11	CARBON	10	5%	1/2W	
R601	1-249-429-11	CARBON	10K	5%	1/4W	
R602	1-249-441-11	CARBON	100K	5%	1/4W	
R603	1-249-433-11	CARBON	22K	5%	1/4W	
R604	1-249-437-11	CARBON	47K	5%	1/4W	
R605	1-249-487-11	CARBON	15K	5%	1/2W	
R606	⚠ 1-216-457-00	METAL OXIDE	1.2K	5%	2W	F
R901	1-214-789-00	RES, METAL PLATE	0.1			
R902	1-214-789-00	RES, METAL PLATE	0.1			
R903	1-214-789-00	RES, METAL PLATE	0.1			
R904	1-214-789-00	RES, METAL PLATE	0.1			
R905	1-214-789-00	RES, METAL PLATE	0.1			
R906	1-214-789-00	RES, METAL PLATE	0.1			
R907	1-249-422-11	CARBON	2.7K	5%	1/4W	
R908	1-247-761-11	CARBON	5.6K	5%	1/2W	
R909	⚠ 1-217-469-00	FUSIBLE	1	5%	1W	F
R910	⚠ 1-217-469-00	FUSIBLE	1	5%	1W	F
R950	1-247-713-11	CARBON	1K	5%	1/4W	

< RELAY >

Ref. No.	Part No.	Description
RY601	1-515-765-11	RELAY

< SWITCH >

Ref. No.	Part No.	Description
S1	⚠ 1-554-920-51	SWITCH, PUSH (AC POWER) (1 KEY)

< TERMINAL >

Ref. No.	Part No.	Description
TM1	* 1-535-142-00	BASE POST 19MM (10MM PITCH) 5P
TM501	1-536-706-00	TERMINAL BOARD (SP)

****

* A-4341-960-A PANEL BOARD, COMPLETE (E3, EA)
* A-4341-961-A PANEL BOARD, COMPLETE (E2, AUS)
****

* A-4341-964-A MICOM BOARD, COMPLETE (E3, EA)
* A-4341-965-A MICOM BOARD, COMPLETE (E2, AUS)
****

* A-4341-972-A VIDEO BOARD, COMPLETE
****

* 1-639-082-11 MAIN VOL BOARD
****

* 1-639-083-11 ROTARY F SW BOARD
****

* 1-639-085-11 DBFB VOL BOARD
****

* 1-639-086-11 MICOM CON. BOARD
****

* 1-639-088-11 SP SW BOARD
****

* 1-639-089-11 MIC BOARD
****

* 1-639-090-11 VIDEO 3 BOARD
****

* 1-639-091-11 VIDEO 3 CON. BOARD
****

* 1-639-092-11 VIDEO CON. BOARD
****

* 1-639-095-11 SP CON. (B) BOARD
****

* 1-639-096-11 SP CON. (C) BOARD
****

< CAPACITOR >

Ref. No.	Part No.	Description				Remark
C117	1-126-161-11	ELECT	2.2uF	20%	50V	
C126	1-130-473-00	MYLAR	0.0015uF	5%	50V	
C127	1-130-484-00	MYLAR	0.012uF	5%	50V	
C128	1-130-484-00	MYLAR	0.012uF	5%	50V	
C129	1-162-219-31	CERAMIC	68PF	5%	50V	
C130	1-162-282-31	CERAMIC	100PF	10%	50V	
C131	1-126-161-11	ELECT	2.2uF	20%	50V	
C132	1-136-169-00	FILM	0.22uF	5%	50V	
C134	1-124-465-00	ELECT	0.47uF	20%	50V	
C137	1-124-910-11	ELECT	47uF	20%	50V	
C217	1-126-161-11	ELECT	2.2uF	20%	50V	
C226	1-130-473-00	MYLAR	0.0015uF	5%	50V	
C227	1-130-484-00	MYLAR	0.012uF	5%	50V	
C228	1-130-484-00	MYLAR	0.012uF	5%	50V	
C229	1-162-219-31	CERAMIC	68PF	5%	50V	
C230	1-162-282-31	CERAMIC	100PF	10%	50V	
C231	1-126-161-11	ELECT	2.2uF	20%	50V	
C232	1-136-169-00	FILM	0.22uF	5%	50V	
C234	1-124-465-00	ELECT	0.47uF	20%	50V	
C237	1-124-910-11	ELECT	47uF	20%	50V	
C301	1-124-257-00	ELECT	2.2uF	20%	50V	
C302	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C303	1-162-219-31	CERAMIC	68PF	5%	50V	
C304	1-162-284-31	CERAMIC	150PF	10%	50V	
C305	1-124-463-00	ELECT	0.1uF	20%	50V	
C306	1-124-257-00	ELECT	2.2uF	20%	50V	
C307	1-162-219-31	CERAMIC	68PF	5%	50V	
C308	1-161-375-00	CERAMIC	0.0022uF	20%	50V	
C309	1-130-493-00	MYLAR	0.068uF	5%	50V	
C310	1-124-234-00	ELECT	22uF	20%	16V	
C311	1-124-234-00	ELECT	22uF	20%	16V	
C401	1-126-059-11	ELECT	10uF	20%	50V	
C402	1-126-059-11	ELECT	10uF	20%	50V	
C403	1-126-059-11	ELECT	10uF	20%	50V	
C404	1-124-471-00	ELECT	1000uF	20%	6.3V	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

PANEL MICOM VIDEO MAIN VOL ROTARY F SW DBFB VOL MICOM CON. SP SW MIC VIDEO 3 VIDEO 3 CON. VIDEO CON. SP CON. (B) SP CON. (C)

Ref. No.	Part No.	Description	Remark
C405	1-124-471-00	ELECT 1000uF 20% 6.3V	
C406	1-124-471-00	ELECT 1000uF 20% 6.3V	
C407	1-161-494-00	CERAMIC 0.022uF 25V	
C408	1-126-049-11	ELECT 22uF 20% 25V	
C701	1-161-494-00	CERAMIC 0.022uF 25V	
C702	1-161-494-00	CERAMIC 0.022uF 25V	
C703	1-161-494-00	CERAMIC 0.022uF 25V	
C704	1-124-638-11	ELECT 22uF 20% 10V	
C705	1-126-154-11	ELECT 47uF 20% 6.3V	
C706	1-161-494-00	CERAMIC 0.022uF 25V	
C707	1-126-154-11	ELECT 47uF 20% 6.3V	
C708	1-161-494-00	CERAMIC 0.022uF 25V	
C709	1-136-165-00	FILM 0.1uF 5% 50V	
C710	1-136-153-00	FILM 0.01uF 5% 50V	
C711	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C712	1-161-494-00	CERAMIC 0.022uF 25V	
C713	1-126-059-11	ELECT 10uF 20% 50V	
C714	1-161-494-00	CERAMIC 0.022uF 25V	
C715	1-161-494-00	CERAMIC 0.022uF 25V	
C716	1-126-049-11	ELECT 22uF 20% 25V	
C717	1-161-494-00	CERAMIC 0.022uF 25V	
C718	1-126-022-11	ELECT 47uF 20% 16V	
C719	1-161-494-00	CERAMIC 0.022uF 25V	
C720	1-125-507-11	CAP, DOUBLE LAYERS 0.22F	
C721	1-164-159-11	CERAMIC 0.1uF 50V	

< VIBRATOR >

Ref. No.	Part No.	Description	Remark
CF701	1-577-359-21	VIBRATOR, CERAMIC	

< CONNECTOR >

Ref. No.	Part No.	Description	Remark
CN702	* 1-568-841-11	SOCKET, CONNECTOR 25P	
CNJ201	* 1-565-364-11	HOUSING, CONNECTOR (PC BOARD) 11P	
CNJ301	* 1-565-347-11	SOCKET, CONNECTOR (PC BOARD) 8P	
CNJ401	* 1-565-347-11	SOCKET, CONNECTOR (PC BOARD) 8P	
CNJ502	1-569-497-11	SOCKET, CONNECTOR 11P	
CNP201	* 1-565-365-11	PIN, CONNECTOR (PC BOARD) 11P	
CNP501	* 1-569-500-11	PIN, CONNECTOR 5P	
CNP502	* 1-569-506-11	PIN, CONNECTOR 11P	
CNP601	* 1-569-501-11	PIN, CONNECTOR 6P	

< DIODE >

Ref. No.	Part No.	Description	Remark
D401	8-719-200-77	DIODE 10E2N	
D701	8-719-301-37	DIODE SEL2210S-CD	
D702	8-719-301-37	DIODE SEL2210S-CD	
D703	8-719-301-37	DIODE SEL2210S-CD	
D704	8-719-301-37	DIODE SEL2210S-CD (E3, EA)	
D705	8-719-301-37	DIODE SEL2210S-CD (E3, EA)	
D706	8-719-301-37	DIODE SEL2210S-CD (E3, EA)	
D707	8-719-200-77	DIODE 10E2N	
D708	8-719-200-77	DIODE 10E2N	
D709	8-719-200-77	DIODE 10E2N	
D711	8-719-912-20	DIODE 1SS120	
D713	8-719-912-20	DIODE 1SS120	
D714	8-719-200-77	DIODE 10E2N	
D715	8-719-200-77	DIODE 10E2N	
D716	8-719-200-82	DIODE 11ES2	
D717	8-719-200-82	DIODE 11ES2	
D718	8-719-200-82	DIODE 11ES2	
D719	8-719-200-77	DIODE 10E2N	
D720	8-719-912-20	DIODE 1SS120	
D721	8-719-912-20	DIODE 1SS120	
D722	8-719-912-20	DIODE 1SS120	
D723	8-719-912-20	DIODE 1SS120	

< IC >

Ref. No.	Part No.	Description	Remark
IC106	8-759-801-01	IC LC4966	
IC107	8-759-801-01	IC LC4966	
IC108	8-759-634-50	IC M5218AL	
IC109	8-759-634-50	IC M5218AL	
IC301	8-759-710-73	IC NJM4580L	
IC401	8-759-991-77	IC BA7625	
IC701	8-759-153-82	IC uPD75106CW-191	
IC702	8-759-962-08	IC BA6208	
IC703	8-759-962-08	IC BA6208	
IC704	8-759-208-06	IC TC4051BPHB	
IC705	8-759-208-06	IC TC4051BPHB	
IC706	8-759-991-02	IC NE555P	
IC707	8-759-820-62	IC LB1639	

< JACK >

Ref. No.	Part No.	Description	Remark
J105	1-580-174-41	JACK, PIN (3P FRONT) (VIDEO 3)	
J301	1-507-854-00	JACK, PHONE (MIC)	
J401	1-565-934-11	JACK, PIN 2P (VIDEO 2)	
J402	1-565-933-11	JACK, PIN 3P (VIDEO 1/DAT, MONITOR)	
J501	1-507-796-71	JACK (HEADPHONES)	

< COIL >

Ref. No.	Part No.	Description	Remark
L401	1-410-521-11	INDUCTOR 100uH	

< TRANSISTOR >

Ref. No.	Part No.	Description	Remark
Q101	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q102	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q107	8-729-900-36	TRANSISTOR DTC124ES	
Q108	8-729-900-63	TRANSISTOR DTA124ES	
Q109	8-729-900-63	TRANSISTOR DTA124ES	
Q110	8-729-900-63	TRANSISTOR DTA124ES	

PANEL **MICOM** **VIDEO** **MAIN VOL** **ROTARY F SW**
DBFB VOL **MICOM CON.** **SP SW** **MIC** **VIDEO 3**
VIDEO 3 CON. **VIDEO CON.** **SP CON. (B)** **SP CON. (C)**

Ref. No.	Part No.	Description	Remark
Q201	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q202	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q401	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q402	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q403	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q404	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q701	8-729-900-36	TRANSISTOR DTC124ES	
Q702	8-729-900-63	TRANSISTOR DTA124ES	
Q703	8-729-900-36	TRANSISTOR DTC124ES	
Q704	8-729-900-63	TRANSISTOR DTA124ES	
Q705	8-729-900-63	TRANSISTOR DTA124ES	
Q706	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q707	8-729-900-36	TRANSISTOR DTC124ES	
		< RESISTOR >	
R117	1-249-417-11	CARBON 1K 5% 1/4W	
R118	1-247-903-00	CARBON 1M 5% 1/4W	
R136	1-249-428-11	CARBON 8.2K 5% 1/4W	
R137	1-249-435-11	CARBON 33K 5% 1/4W	
R138	1-249-435-11	CARBON 33K 5% 1/4W	
R139	1-247-903-00	CARBON 1M 5% 1/4W	
R140	1-249-417-11	CARBON 1K 5% 1/4W	
R141	1-249-433-11	CARBON 22K 5% 1/4W	
R142	1-249-425-11	CARBON 4.7K 5% 1/4W	
R143	1-249-424-11	CARBON 3.9K 5% 1/4W	
R144	1-249-441-11	CARBON 100K 5% 1/4W	
R145	1-249-427-11	CARBON 6.8K 5% 1/4W	
R146	1-249-412-11	CARBON 390 5% 1/4W	
R147	1-249-429-11	CARBON 10K 5% 1/4W	
R158	1-249-433-11	CARBON 22K 5% 1/4W	
R159	1-249-433-11	CARBON 22K 5% 1/4W	
R160	1-249-429-11	CARBON 10K 5% 1/4W	
R161	1-249-441-11	CARBON 100K 5% 1/4W	
R217	1-249-417-11	CARBON 1K 5% 1/4W	
R218	1-247-903-00	CARBON 1M 5% 1/4W	
R236	1-249-428-11	CARBON 8.2K 5% 1/4W	
R237	1-249-435-11	CARBON 33K 5% 1/4W	
R238	1-249-435-11	CARBON 33K 5% 1/4W	
R239	1-247-903-00	CARBON 1M 5% 1/4W	
R240	1-249-417-11	CARBON 1K 5% 1/4W	
R241	1-249-433-11	CARBON 22K 5% 1/4W	
R242	1-249-425-11	CARBON 4.7K 5% 1/4W	
R243	1-249-424-11	CARBON 3.9K 5% 1/4W	
R244	1-249-441-11	CARBON 100K 5% 1/4W	
R245	1-249-427-11	CARBON 6.8K 5% 1/4W	
R246	1-249-412-11	CARBON 390 5% 1/4W	
R247	1-249-429-11	CARBON 10K 5% 1/4W	
R301	1-249-441-11	CARBON 100K 5% 1/4W	
R302	1-249-417-11	CARBON 1K 5% 1/4W	
R303	1-249-429-11	CARBON 10K 5% 1/4W	
R304	1-249-412-11	CARBON 390 5% 1/4W	
R305	1-249-429-11	CARBON 10K 5% 1/4W	
R306	1-249-417-11	CARBON 1K 5% 1/4W	
R307	1-249-441-11	CARBON 100K 5% 1/4W	
R308	1-249-417-11	CARBON 1K 5% 1/4W	
R309	1-249-429-11	CARBON 10K 5% 1/4W	
R310	1-249-416-11	CARBON 820 5% 1/4W	
R401	1-247-804-11	CARBON 75 5% 1/4W	
R402	1-247-804-11	CARBON 75 5% 1/4W	
R403	1-247-804-11	CARBON 75 5% 1/4W	
R404	1-249-403-11	CARBON 68 5% 1/4W	
R405	1-249-429-11	CARBON 10K 5% 1/4W	
R406	1-249-403-11	CARBON 68 5% 1/4W	
R407	1-249-429-11	CARBON 10K 5% 1/4W	
R408	1-249-403-11	CARBON 68 5% 1/4W	
R409	1-249-429-11	CARBON 10K 5% 1/4W	
R410	1-249-408-11	CARBON 180 5% 1/4W	
R411	1-249-408-11	CARBON 180 5% 1/4W	
R412	1-249-408-11	CARBON 180 5% 1/4W	
R413	1-249-408-11	CARBON 180 5% 1/4W	
R414	1-249-408-11	CARBON 180 5% 1/4W	
R415	1-249-408-11	CARBON 180 5% 1/4W	
R416	1-249-429-11	CARBON 10K 5% 1/4W	
R417	1-249-417-11	CARBON 1K 5% 1/4W	
R418	1-249-433-11	CARBON 22K 5% 1/4W	
R419	1-249-417-11	CARBON 1K 5% 1/4W	
R420	1-249-433-11	CARBON 22K 5% 1/4W	
R517	1-247-750-11	CARBON 680 5% 1/2W	
R567	1-247-750-11	CARBON 680 5% 1/2W	
R701	1-249-433-11	CARBON 22K 5% 1/4W	
R702	1-249-417-11	CARBON 1K 5% 1/4W	
R703	1-249-429-11	CARBON 10K 5% 1/4W	
R704	1-249-429-11	CARBON 10K 5% 1/4W	
R705	1-249-429-11	CARBON 10K 5% 1/4W	
R706	1-249-429-11	CARBON 10K 5% 1/4W	
R707	1-249-429-11	CARBON 10K 5% 1/4W	
R708	1-249-433-11	CARBON 22K 5% 1/4W	
R709	1-249-433-11	CARBON 22K 5% 1/4W	
R710	1-249-433-11	CARBON 22K 5% 1/4W	
R711	1-249-433-11	CARBON 22K 5% 1/4W	
R712	1-249-433-11	CARBON 22K 5% 1/4W	
R713	1-249-433-11	CARBON 22K 5% 1/4W	
R714	1-249-433-11	CARBON 22K 5% 1/4W	
R715	1-249-433-11	CARBON 22K 5% 1/4W	
R716	1-249-433-11	CARBON 22K 5% 1/4W	
R717	1-249-429-11	CARBON 10K 5% 1/4W	
R718	1-249-410-11	CARBON 270 5% 1/4W	
R719	1-249-409-11	CARBON 220 5% 1/4W	

PANEL MICOM VIDEO MAIN VOL ROTARY F SW DBFB VOL MICOM CON. SP SW MIC VIDEO 3 VIDEO 3 CON. VIDEO CON. SP CON. (B) SP CON. (C)

Ref. No.	Part No.	Description			Remark
R720	1-249-410-11	CARBON	270	5%	1/4W
R721	1-249-410-11	CARBON	270	5%	1/4W
R722	1-249-421-11	CARBON	2.2K	5%	1/4W
R723	1-249-421-11	CARBON	2.2K	5%	1/4W
R724	1-249-421-11	CARBON	2.2K	5%	1/4W
R725	1-249-421-11	CARBON	2.2K	5%	1/4W
R726	1-249-412-11	CARBON	390	5%	1/4W(E3, EA)
R727	1-249-412-11	CARBON	390	5%	1/4W(E3, EA)
R728	1-249-412-11	CARBON	390	5%	1/4W(E3, EA)
R729	1-249-415-11	CARBON	680	5%	1/4W
R730	1-249-421-11	CARBON	2.2K	5%	1/4W
R731	1-249-429-11	CARBON	10K	5%	1/4W
R732	1-249-421-11	CARBON	2.2K	5%	1/4W
R733	1-249-429-11	CARBON	10K	5%	1/4W
R734	1-249-429-11	CARBON	10K	5%	1/4W
R735	1-249-429-11	CARBON	10K	5%	1/4W
R736	1-249-429-11	CARBON	10K	5%	1/4W
R737	1-249-429-11	CARBON	10K	5%	1/4W
R738	1-249-429-11	CARBON	10K	5%	1/4W
R739	1-249-429-11	CARBON	10K	5%	1/4W
R740	1-249-429-11	CARBON	10K	5%	1/4W
R741	1-249-429-11	CARBON	10K	5%	1/4W
R742	1-249-415-11	CARBON	680	5%	1/4W
R743	1-249-438-11	CARBON	56K	5%	1/4W
R744	1-247-885-00	CARBON	180K	5%	1/4W
R745	1-249-429-11	CARBON	10K	5%	1/4W
R746	1-249-417-11	CARBON	1K	5%	1/4W
R747	1-249-417-11	CARBON	1K	5%	1/4W
R748	1-249-433-11	CARBON	22K	5%	1/4W
R749	1-249-424-11	CARBON	3.9K	5%	1/4W
R750	1-249-429-11	CARBON	10K	5%	1/4W
R751	1-249-425-11	CARBON	4.7K	5%	1/4W
R752	1-249-429-11	CARBON	10K	5%	1/4W
R753	1-249-417-11	CARBON	1K	5%	1/4W
R754	1-247-903-00	CARBON	1M	5%	1/4W
R755	1-249-417-11	CARBON	1K	5%	1/4W
R756	1-249-415-11	CARBON	680	5%	1/4W
R757	1-249-419-11	CARBON	1.5K	5%	1/4W
R758	1-249-417-11	CARBON	1K	5%	1/4W
R759	1-249-417-11	CARBON	1K	5%	1/4W
R760	1-249-417-11	CARBON	1K	5%	1/4W
R761	1-249-417-11	CARBON	1K	5%	1/4W
R762	1-249-417-11	CARBON	1K	5%	1/4W
R763	1-249-433-11	CARBON	22K	5%	1/4W
R764	1-249-433-11	CARBON	22K	5%	1/4W
R765	1-249-433-11	CARBON	22K	5%	1/4W
R766	1-249-433-11	CARBON	22K	5%	1/4W
R767	1-249-417-11	CARBON	1K	5%	1/4W
R768	1-249-417-11	CARBON	1K	5%	1/4W
R769	1-249-417-11	CARBON	1K	5%	1/4W
R770	1-249-429-11	CARBON	10K	5%	1/4W
R771	1-249-417-11	CARBON	1K	5%	1/4W
R772	1-249-417-11	CARBON	1K	5%	1/4W
R773	1-249-417-11	CARBON	1K	5%	1/4W

< VARIABLE RESISTOR >

Ref. No.	Part No.	Description
RV101	1-238-978-11	RES, VAR, CARBON 100KX2 (TREBLE)
RV102	1-238-978-11	RES, VAR, CARBON 100KX2 (BASS)
RV103	1-241-508-11	RES, VAR, CARBON 100K/100K(DBFB LEVEL)
RV104	1-238-459-11	RES, VAR, CARBON 100K (BALANCE)
RV105	1-238-708-21	RES, VAR, CARBON 10K/100K/100K(VOLUME)
RV301	1-241-317-11	RES, VAR, CARBON 50K (MIC LEVEL)

< SWITCH >

Ref. No.	Part No.	Description
S501	1-571-987-11	SWITCH, PUSH (2 KEY) (SPEAKERS)
S701	1-572-733-11	SWITCH, ROTARY (WITH MOTOR) (FUNCTION VIDEO)
S702	1-572-732-11	SWITCH, ROTARY (WITH MOTOR) (FUNCTION AUDIO)
S703	1-554-303-21	SWITCH, TACTILE (SET) (E3, EA)
S704	1-554-303-21	SWITCH, TACTILE (3) (E3, EA)
S705	1-554-303-21	SWITCH, TACTILE (2) (E3, EA)
S706	1-554-303-21	SWITCH, TACTILE (1) (E3, EA)
S707	1-554-303-21	SWITCH, TACTILE (DBFB)
S708	1-554-303-21	SWITCH, TACTILE (EQ REC)
S709	1-554-303-21	SWITCH, TACTILE (CD DIRECT)

****

MISCELLANEOUS
****

Ref. No.		Part No.	Description
9	*	1-590-242-11	WIRE, FLAT TYPE (25 CORE)
63	⚠	1-575-654-11	CORD, POWER (EA)
63	⚠	1-575-656-11	CORD, POWER (E2, E3)
63	⚠	1-690-056-11	CORD, POWER (AUS)
CN1	⚠	1-526-794-11	OUTLET, AC (EA)
CN1	⚠	1-526-882-00	OUTLET, AC (E2, E3)
CN1	⚠	1-540-196-11	OUTLET, AC (AUS)
F1	⚠	1-532-388-51	FUSE (T2A)
F2	⚠	1-532-388-51	FUSE (T2A)
F901	⚠	1-532-388-51	FUSE (T2A)
F902	⚠	1-532-388-51	FUSE (T2A)
J301		1-507-849-11	JACK, LARGE TYPE (MIC)
J501		1-507-796-21	JACK (HEADPHONES)
S2	⚠	1-570-307-11	SWITCH, VOLTAGE CHANGE
T1	⚠	1-450-480-11	TRANSFORMER, POWER

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		ACCESSORY & PACKING MATERIAL	
		****************************	
*	4-934-859-01	CUSHION	

****

HARDWARE LIST

Ref. No.	Part No.	Description
# 1	7-621-773-93	SCREW (PANEL 2.6 TP2)
# 2	7-682-547-04	SCREW +BVTT 3X6 (S)
# 3	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S
# 4	7-682-547-09	SCREW +BVTT 3X6 (S)
# 5	7-621-849-00	SCREW, TAPPING
# 6	7-682-548-04	SCREW +BVTT 3X8 (S)
# 7	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3
# 8	7-682-560-04	SCREW +BVTT 4X6 (S)
# 9	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S

Sony Corporation

Audio Group

English
91F1814-1
printed in Japan

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Published by Customer Relations and Service Group.

TA-D705

SONY®

SERVICE MANUAL

E Model
Australian Model

SUPPLEMENT-1

File this supplement with the service manual.

Block Diagram

9-956-425-82

Sony Corporation
Audio Group

English
91I1814-1
Printed in Japan
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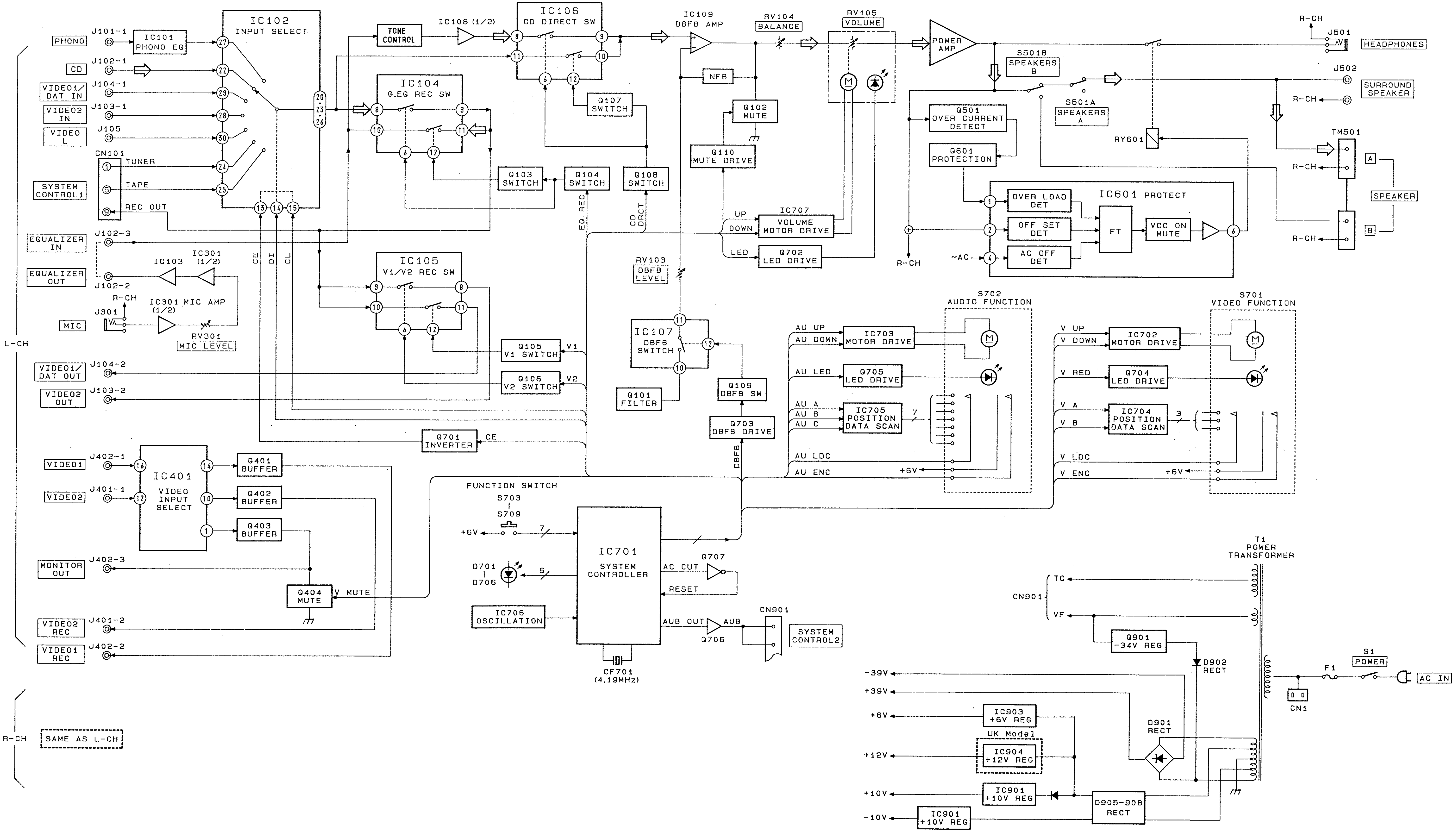
Published by Customer Relations and Service Group

BLOCK DIAGRAM

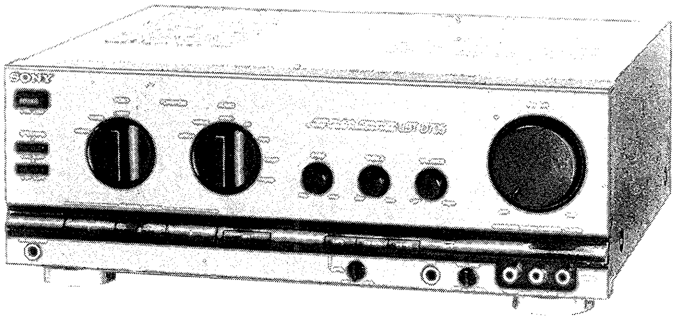


PHONO
J101-1
IC101
PHONO EQ
CD
J102-1
VIDEO1/ DAT IN
J104-1
VIDEO2 IN
J103-1
VIDEO L
J105
CN101
TUNER
TAPE
SYSTEM CONTROL1
REC OUT
IC102
INPUT SELECT
TONE CONTROL
IC108 (1/2)
IC106
CD DIRECT SW
IC104
G.EQ REC SW
Q107 SWITCH
Q103 SWITCH
Q104 SWITCH
Q108 SWITCH
EQ. REC
CD DRCT
CE
DI
CL
IC109
DBFB AMP
NFB
RV104
BALANCE
RV105
VOLUME
POWER AMP
Q102 MUTE
Q110 MUTE DRIVE
IC707
VOLUME MOTOR DRIVE
UP
DOWN
LED
Q702 LED DRIVE
RV103
DBFB LEVEL
IC107
DBFB SWITCH
Q101 FILTER
Q109 DBFB SW
Q703 DBFB DRIVE
DBFB
R-CH
J501
HEADPHONES
S501B
SPEAKERS B
J502
SURROUND SPEAKER
S501A
SPEAKERS A
Q501
OVER CURRENT DETECT
Q601
PROTECTION
RY601
TM501
A
B
SPEAKER
IC601 PROTECT
OVER LOAD DET
OFF SET DET
AC OFF DET
FT
VCC ON MUTE
~AC
EQUALIZER IN
J102-3
EQUALIZER OUT
J102-2
IC103
IC301 (1/2)
MIC
J301
IC301 MIC AMP (1/2)
RV301
MIC LEVEL
L-CH
IC105
V1/V2 REC SW
Q105 V1 SWITCH
V1
Q106 V2 SWITCH
V2
VIDEO1/ DAT OUT
J104-2
VIDEO2 OUT
J103-2
Q701 INVERTER
CE
S702
AUDIO FUNCTION
AU UP
AU DOWN
IC703 MOTOR DRIVE
AU LED
Q705 LED DRIVE
AU A
AU B
AU C
IC705 POSITION DATA SCAN
7
AU LDC
AU ENC
+6V
S701
VIDEO FUNCTION
V UP
V DOWN
IC702 MOTOR DRIVE
V RED
Q704 LED DRIVE
V A
V B
IC704 POSITION DATA SCAN
3
V LDC
V ENC
+6V
VIDEO1
J402-1
VIDEO2
J401-1
IC401
VIDEO INPUT SELECT
Q401 BUFFER
Q402 BUFFER
Q403 BUFFER
MONITOR OUT
J402-3
Q404 MUTE
V MUTE
VIDEO2 REC
J401-2
VIDEO1 REC
J402-2
FUNCTION SWITCH
S703 | S709
+6V
7
D701 | D706
6
IC701
SYSTEM CONTROLLER
AC CUT
Q707
RESET
IC706 OSCILLATION
AUB OUT
AUB
Q706
CN901
SYSTEM CONTROL2
CF701 (4.19MHz)
R-CH
SAME AS L-CH
T1
POWER TRANSFORMER
TC
VF
CN901
Q901 -34V REG
D902 RECT
S1 POWER
F1
AC IN
CN1
-39V
+39V
+6V
IC903 +6V REG
UK Model
IC904 +12V REG
+12V
D901 RECT
+10V
IC901 +10V REG
D905-908 RECT
-10V
IC901 +10V REG

TA-D705

SERVICE MANUAL

E Model
Australian Model



SPECIFICATIONS

Continuous RMS power output	70 W + 70 W (6 ohms, at 1 kHz, 5% THD) 60 W + 60 W (6 ohms, DIN, 1 kHz)
Music power output	100 W + 100 W (6 ohms, at 1 kHz, 10% THD)

Input	Jack type	Sensitivity	Impedance
PHONO (MM)	Phono	2.5 mV	47 kohms
VIDEO1/DAT	Phono	200 mV	47 kohms
VIDEO2	Phono	200 mV	47 kohms
VEDEO3	Phono	200 mV	47 kohms
CD	Phono	200 mV	47 kohms
EQUALIZER	Phono	200 mV	47 kohms
MIC	Phone	1 mV	10 kohms

Output	Jack type	Voltage	Impedance
VIDEO1/DAT	Phono	180 mV	2 kohms
VIDEO 2	Phono	180 mV	2 kohms
EQUALIZER	Phono	180 mV	2 kohms
SURROUND SPEAKER	Phono	Accepts speakers of 16 ohms	
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more	

Frequency response	10 Hz to 50 kHz $^{+0}_{-3}$ dB
Power requirements	120V/220V/240V AC,50/60Hz
Power consumption	190W
AC outlet	1 unswitched, 100W max.
Weight	Approx. 6.6kg(14 lbs 9 oz)
Dimensions	Approx. 355 × 132.5 × 320 mm (w/h/d, including projections) (14 × 5 $^{1}/_{4}$ × 12 $^{5}/_{8}$ inches)

Design and specifications subject to change without notice.

Note
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

使用時は添付資料も参照のこと
Refer to the additional documents.

STEREO AMPLIFIER

SONY®

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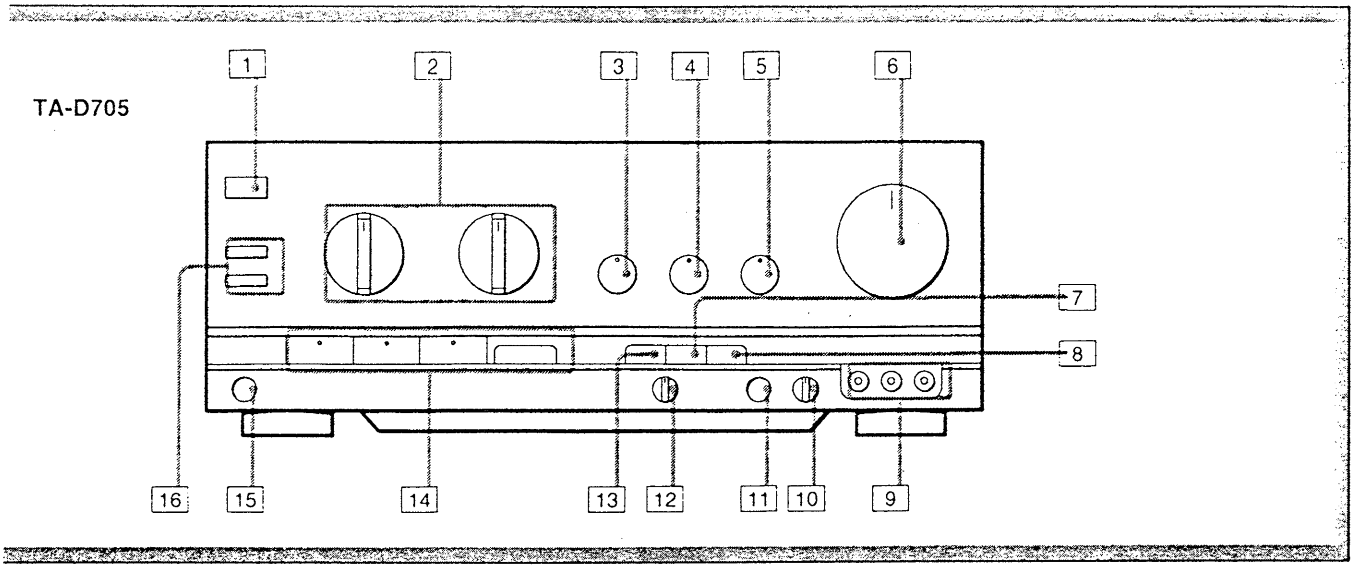
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

This section is extracted from instruction manual.



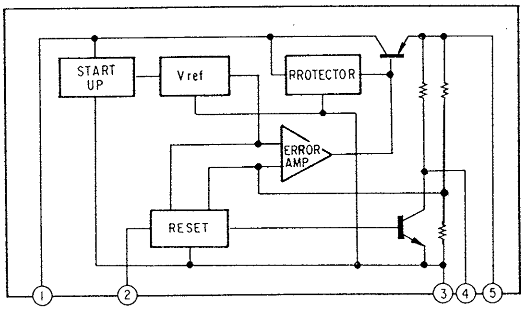
Amplifier

1 POWER switch ⑩
2 FUNCTION selectors and indicators
VIDEO source selector
AUDIO source slelctor
When the video source is selected, the ausio source is selected at the same time.
To select the ausio source separately, set the video source first.
3 BASS control ⑫
4 TREBLE control ⑫
5 BALANCE control ⑫
6 VOLUME control and indicator ⑫
7 CD DIRECT and indicator ⑭
8 EQ REC button and indicator ㊱
9 VIDEO 3 input jacks ⑨
10 MIC (microphone) LEVEL control (58)
11 MIC (microphone) jack (58)
12 DBFB LEVEL control ⑫
13 DBFB button and indicator ⑫
14 Buttons for storing (104) (E3,Saudi Arabia model only)
15 HEADPHONES jack
16 SPEAKERS selectors ⑫

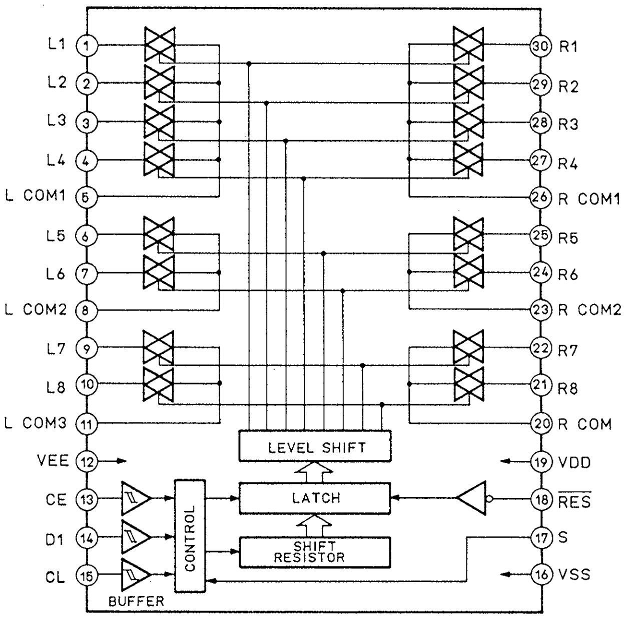
SECTION 2
DIAGRAMS

2-1. IC Block Diagrams

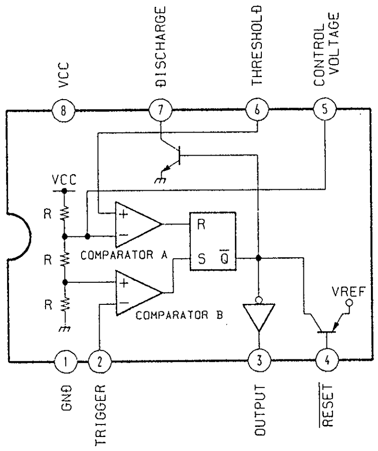
IC903 L78MR06


START UP
Vref
RROTECTOR
ERROR AMP
RESET
1
2
3
4
5

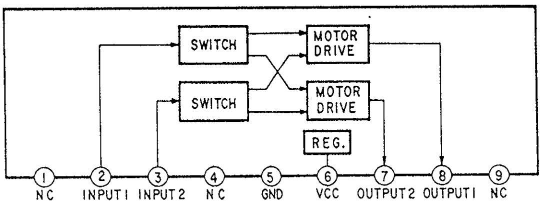
IC102 LC7821


L1 1
L2 2
L3 3
L4 4
L COM1 5
L5 6
L6 7
L COM2 8
L7 9
L8 10
L COM3 11
VEE 12
CE 13
D1 14
CL 15
BUFFER
CONTROL
LEVEL SHIFT
LATCH
SHIFT RESISTOR
30 R1
29 R2
28 R3
27 R4
26 R COM1
25 R5
24 R6
23 R COM2
22 R7
21 R8
20 R COM
19 VDD
18 RES
17 S
16 VSS

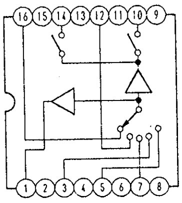
IC706 NE555P


VCC
DISCHARGE
THRESHOLD
CONTROL VOLTAGE
8
7
6
5
VCC
R
R
R
COMPARATOR A
COMPARATOR B
R
S
Q
VREF
1
2
3
4
GND
TRIGGER
OUTPUT
RESET

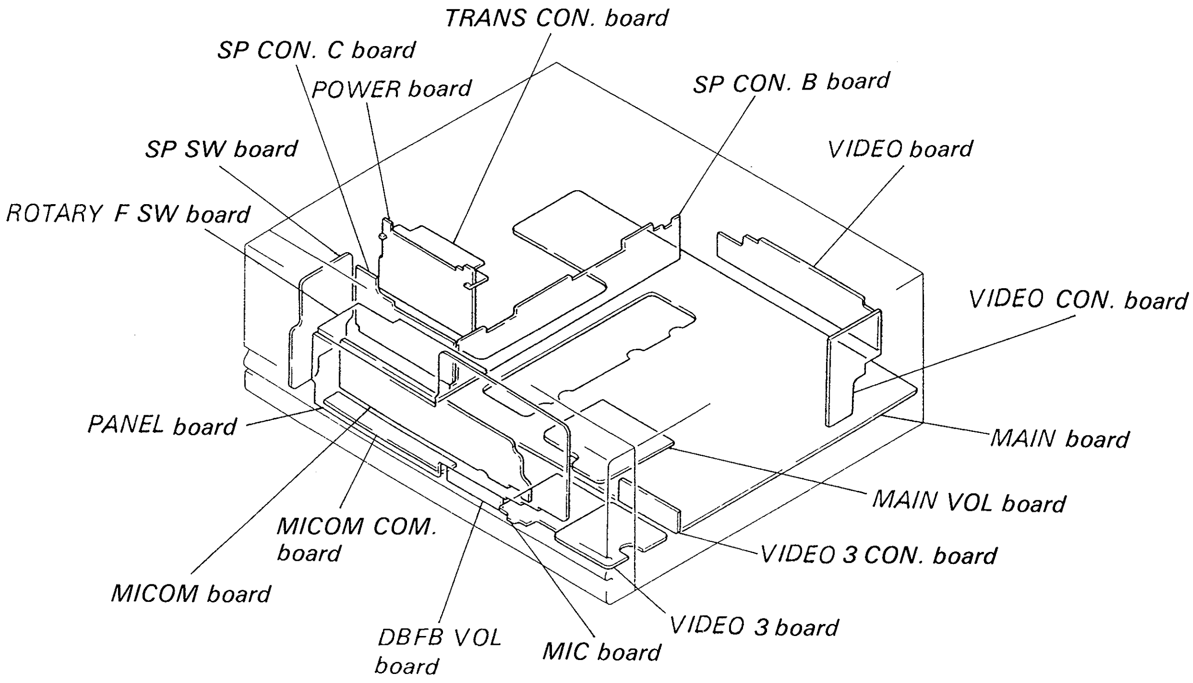
IC702, 703 BA6208


SWITCH
SWITCH
MOTOR DRIVE
MOTOR DRIVE
REG.
1 NC
2 INPUT1
3 INPUT2
4 NC
5 GND
6 VCC
7 OUTPUT2
8 OUTPUT1
9 NC

IC401 BA7625

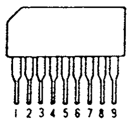

16
15
14
13
12
11
10
9
1
2
3
4
5
6
7
8

2-2. CIRCUIT BOARDS LOCATION

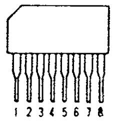

TRANS CON. board
SP CON. C board
POWER board
SP CON. B board
SP SW board
VIDEO board
ROTARY F SW board
VIDEO CON. board
PANEL board
MAIN board
MAIN VOL board
MICOM COM. board
VIDEO 3 CON. board
MICOM board
VIDEO 3 board
DBFB VOL board
MIC board

- Semiconductor Lead Layout

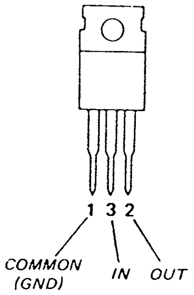
BA6208



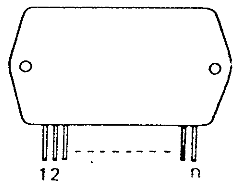
M5218AL
NJM4580L
μPC1237HA



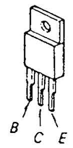
M5F7910L


1 3 2
COMMON (GND)
IN
OUT

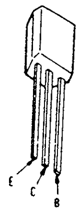
STK4182MK2



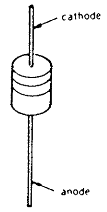
2SB1094-L



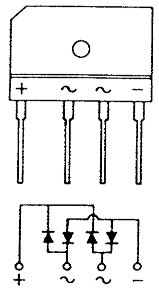
2SC2603-EF
2SC3622A-LK
DTA124ES
DTC124ES



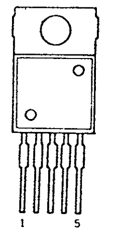
11ES2
1SS120
UZL-33H
UZL-7M1
UZP-6.8BC


cathode
anode

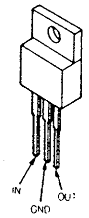
RBV-602-01



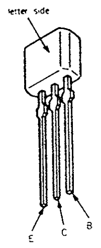
L78MR06



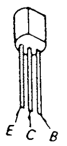
M5F7810L



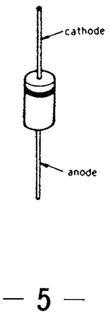
2SA1175-HFE


letter side
E
C
B

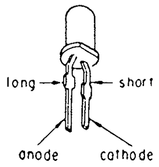
2SC1841-PAFAEA



10E2N
1S1585


cathode
anode

SEL2210S-CD


long
short
anode
cathode

PIN DESCRIPTION

· IC701(μPD75106CW) for system controller

Pin No.	Port	I／O	Nomal	Description
1	P13	I		VIF encode (INT3)
2	P12	I		AUF encode (INT2)
3	P11	I		Pulse timing (INT1)
4	P10	I		AUBUS Input (INT0)
5	PTH03	I		N.C (7 PIN)
6	PTH02	I		N.C (7 PIN)
7	PTH01	I		Relay Input
8	PTH00	I		Volume position
9	T10	I		N.C (GND)
10	T00	I		N.C (GND)
11	P23	O	L	AUBUS Output
12	P22	O	L	N.C
13	P21	O	L	N.C
14	P20	O	L	N.C
15	P03	I		Decision of destination.
16	P02	I		VIF location pulse
17	P01	I		AUF location pulse
18	P00	I		AC cut
19	P123	O	L	Mute
20	P122	O	L	Video mute
21	P121	O	L	N.C
22	P120	O	L	CD DIRECT ON/OFF
23	P133	O	L	Video Input control B
24	P132	O	L	Video Input control A
25	P131	O	L	Video REC control 1
26	P130	O	L	Video REC control 0
27	P143	O	H	EQ REC ON/OFF
28	P142	O	L	LC7821 CE
29	P141	O	L	LC7821 DI
30	P140	O	L	LC7821 CL
31	NC			N.C
32	VDD			Power supply
33	P33	O	H	AUF button LED
34	P32	I		CD DIRECT Key matrix Input
35	P31	I		EQ REC Key matrix Input
36	P30	I		DBFB Key matrix input
37	P43	I		PRESET 1 Key matrix Input
38	P42	I		PRESET 2 Key matrix Input
39	P41	I		PRESET 3 Key matrix Input
40	P40	I		SET Key matrix Input
41	P53	O	L	AU motor SW4051 3
42	P52	O	L	AU motor SW4051 2
43	P51	O	L	AU motor SW4051 1
44	P50	O	L	AU motor SW4051 0
45	$\overline{\text{RESET}}$	I	H	Used to reset
46	X2			Cristal oscillator
47	X1			Cristal oscillator
48	P63	O	L	Volume Down
49	P62	O	L	Volume Up
50	P61	O	L	VI motor SW4052 1
51	P60	O	L	VI motor SW4052 0
52	P73	O	H	VIF button LED
53	P72	O	H	PRESET 1 LED
54	P71	O	H	PRESET 2 LED
55	P70	O	H	PRESET 3 LED
56	P83	O	L	AUF Down
57	P82	O	L	AUF Up
58	P81	O	L	VIF Down
59	P80	O	L	VIF Up
60	P93	O	H	CD DIRECT LED
61	P92	O	H	EQ REC LED
62	P91	O	H	Volume LED
63	P90	O	H	DBFB ON/OFF & LED
64	VSS			GND potential

2-3. PRINTED WIRING BARDS

Note:

- ● ○—— : parts extracted from the component side.

EA : Saudi Arabia
AUS : Australian

[MAIN VOL BOARD]
[PANEL BOARD]
[ROTARY F SW BOARD]
[DBFB VOL BOARD]
[MICOM CON.BOARD]
[MICOM BOARD]
[VIDEO3 BOARD]
[MIC BOARD]
[VIDEO 3 CON.BOARD]
[SP CON.B BOARD]
[SP CON. C BOARD]
[SP SW BOARD]
[VIDEO CON.BOARD]
[VIDEO BOARD]
[MAIN BOARD]
[TRANS CON. BOARD]
[POWER BOARD]
HEADPHONES
SPEAKER
SURROUND SPEAKER
VOLTAGE SELECTOR
AC OUTLET
T1 POWER TRANSFORMER

2-4. SCHEMATIC DIAGRAM —

[MAIN BOARD]
IC101 EQ AMP
IC102 INPUT SELECT
IC103 MIC MIXING AMP
IC104 EQ REC
IC105 V1/V2 REC
[ROTARY F SW BOARD]
IC702 MOTOR DRIVE (VIDEO)
IC703 MOTOR DRIVE (AUDIO)
IC704 POSITION DATA SCAN (VIDEO)
IC705 POSITION DATA SCAN (AUDIO)
IC106 CD DIRECT SW
IC107 DBFB SW
IC108 TONE
IC109 DBFB AMP
[DBFB VOL BOARD] (1/2)
RV103-1 100K DBFB LEVEL
RV103-2 100K DBFB LEVEL
[PANEL BOARD]
[MICOM CON. BOARD]
[VIDEO CON. BOARD]
[VIDEO BOARD]
IC401 VIDEO INPUT SELECT
[VIDEO 3 BOARD]
[VIDEO 3 CON. BOARD]
[MIC BOARD]
IC301 MIC AMP
MIC LEVEL
IC701 SYSTEM CONTROLLER
IC706 OSCILLATION
[MICOM BOARD]
IC501 POWER AMP
IC601 PROTECT
[SP SW BOARD]
[SP CON. C BOARD]
[SP CON. B BOARD]
[MAIN VOL BOARD]
IC707 VOLUME MOTOR DRIVE
IC903 REG
IC901 10V REG
IC902 -10V REG
[POWER BOARD]
[TRANS CON. BOARD]
T1 POWER TRANSFORMER
S2 VOLTAGE SELECTOR 120V 220V 240V
AC OUTLET UNSWITCHED 100W MAX
S1 POWER
AC IN
J501 HEADPHONES
J502 SURROUND SPEAKER
S501B SPEAKERS B
S501A SPEAKERS A
TM501 SPEAKER
CN901 SYSTEM CONTROL 2
CN101 SYSTEM CONTROL 1
J101-1 PHONO
J102-1 CD
TUNER
TAPE
REC OUT
EA/AUS

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D401	E-17	IC705	B-10
D501	E-25	IC706	G-13
D551	E-25	IC707	C-3
D601	I-25	IC901	J-20
D602	C-23	IC902	H-21
D603	D-24	IC903	I-21
D604	D-23		
D701	E-8	Q101	B-5
D702	E-6	Q102	D-5
D703	E-7	Q103	E-21
D704	E-11	Q104	D-21
D705	E-12	Q105	D-21
D706	E-14	Q106	D-21
D707	C-14	Q107	C-9
D708	C-14	Q108	C-8
D709	C-14	Q109	C-7
D710	H-22	Q110	D-6
D711	G-9	Q201	C-5
D712	B-28	Q202	D-6
D713	H-9	Q401	G-17
D714	C-2	Q402	F-17
D715	E-14	Q403	I-17
D716	H-9	Q404	J-17
D717	H-10	Q501	F-25
D718	H-9	Q551	E-25
D719	C-9	Q601	C-24
D720	E-13	Q701	H-9
D721	E-11	Q702	D-2
D722	E-11	Q703	C-9
D723	E-10	Q704	E-12
D901	K-24	Q705	E-10
D902	H-31	Q706	G-9
D903	H-32	Q707	G-10
D904	I-32	Q901	G-32
D905	I-30		
D906	I-30		
D907	H-30		
D908	H-30		
D909	J-20		
D910	J-21		
IC101	C-19		
IC102	F-21		
IC103	G-21		
IC104	C-21		
IC105	C-22		
IC106	B-8		
IC107	B-6		
IC108	C-8		
IC109	C-6		
IC301	H-4		
IC401	F-16		
IC501	G-25		
IC601	C-24		
IC701	G-11		
IC702	B-13		
IC703	B-11		
IC704	B-12		

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

- △ : internal component.
- ▭ : nonflammable resistor.
- ▭ : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B+ Line
- B– : B– Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

- Signal path. ⇨ : CD
⇨ : TV (PICTURE)

EA : Saudi Arabia
AUS : Australian

SECTION 3
EXPLODED VIEWS

NOTE:

- −XX, −X mean standardized parts, so they may have some differences from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts

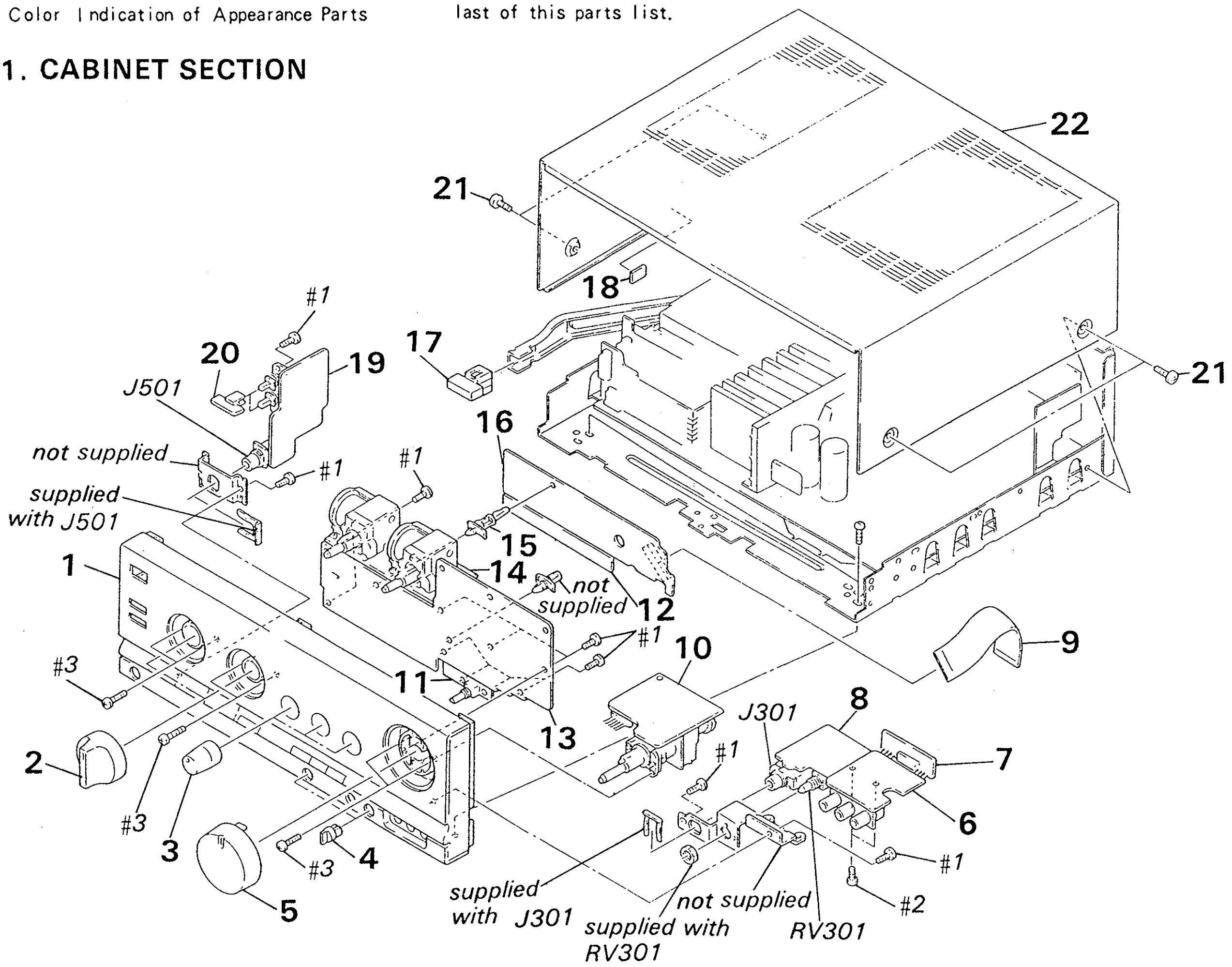
Example:
KNOB, BALANCE(WHITE)...(WHT)
↑ ↑
Part's Color Cabinet's Color

- Hardware (#mark) list is given in the last of this parts list.

EA : Saudi Arabia
AUS : Australian

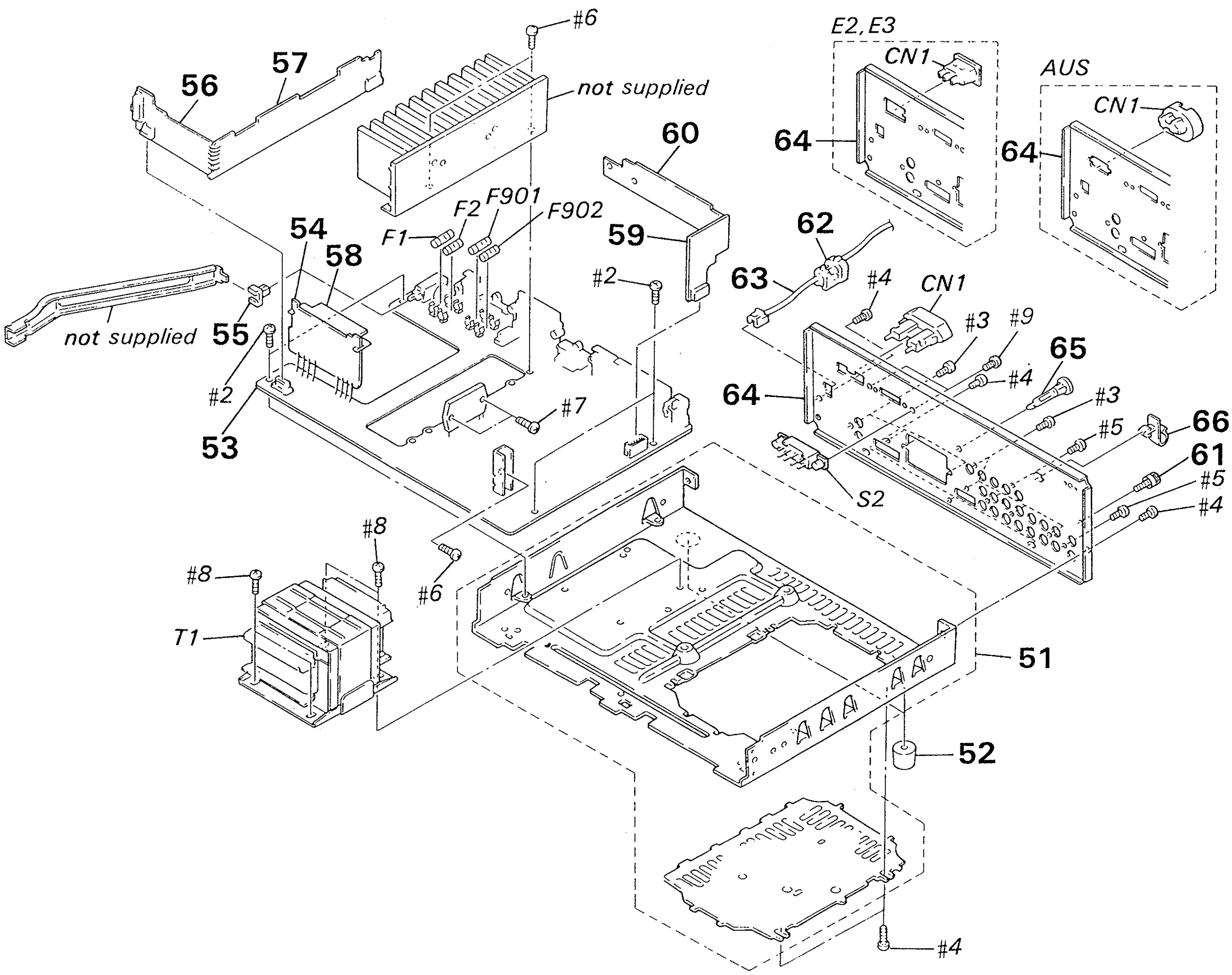
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

3-1. CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	X-4941-407-1	PANEL ASSY, FRONT (E3, EA)	
1	X-4941-408-1	PANEL (M) ASSY, FRONT (E2, AUS)	
2	X-4941-026-1	KNOB (DIA. 36) ASSY, SQUARE	
3	4-943-979-01	KNOB (DIA. 16), ROUND	
4	4-933-116-11	KNOB (C, TYPE), LOV	
5	X-4941-136-1	KNOB ASSY, ROUND	
6	1-639-090-11	VIDEO 3 BOARD	
7	1-639-091-11	VIDEO 3 CON BOARD	
8	1-639-089-11	MIC BOARD	
9	* 1-590-242-11	WIRE, FLAT TYPE (25 CORE)	
10	1-639-082-11	MAIN VOL BOARD	
11	1-639-085-11	DBFB VOL BOARD	
12	1-639-086-11	MICOM CON. BOARD	
13	* A-4341-960-A	PANEL BOARD, COMPLETE (E3, EA)	
13	* A-4341-961-A	PANEL BOARD, COMPLETE (E2, AUS)	
14	1-639-083-11	ROTARY F SW BOARD	
15	* 4-924-098-01	HOLDER, PC BOARD	
16	* A-4341-964-A	MICOM BOARD, COMPLETE (E3, EA)	
16	* A-4341-965-A	MICOM BOARD, COMPLETE (E2, AUS)	
17	4-921-919-01	BUTTON (P)	
18	* 4-911-047-01	VIBRATION CONTROL (D)	
19	1-639-088-11	SP SW BOARD	
20	4-937-308-01	BUTTON (SP)	
21	3-363-099-01	SCREW (CASE +3X8 TP2)	
22	* 4-939-803-91	CASE	
J301	1-507-849-11	JACK, LARGE TYPE (MIC)	
J501	1-507-796-21	JACK (HEADPHONES)	
RV301	1-241-317-11	RES, VAR, CARBON 50K	

3-2. MAIN BOARD SECTION


#6
not supplied
56
57
60
E2, E3
CN1
64
AUS
CN1
64
F2
F901
F902
54
58
F1
59
62
#2
63
#4
CN1
#3
#9
65
not supplied
55
#2
#4
64
#3
#7
53
#5
66
61
S2
#5
#4
#8
#8
#6
T1
51
52
#4

Ref. No.	Part No.	Description	Remark
51	* X-4917-246-1	CHASSIS ASSY	
52	4-931-169-01	FOOT	
53	* A-4341-954-A	MAIN BOARD, COMPLETE	
54	1-639-065-11	POWER BOARD	
55	4-866-342-00	JOINT (B), KNOB	
56	1-639-096-11	SP CON. (C) BOARD	
57	1-639-095-11	SP CON. (B) BOARD	
58	1-639-066-11	TRANS CON. BOARD	
59	1-639-092-11	VIDEO CON. BOARD	
60	* A-4341-972-A	VIDEO BOARD, COMPLETE	
61	3-706-165-00	SCREW	
62	* 3-703-244-02	BUSHING (S) (4516), CORD (EA, AUS)	
62	* 3-703-571-11	BUSHING (S) (4516), CORD (E2, E3)	
63	⚠ 1-575-654-11	CORD, POWER (EA)	
63	⚠ 1-575-656-11	CORD, POWER (E2, E3)	
63	⚠ 1-690-056-11	CORD, POWER (AUS)	

Ref. No.	Part No.	Description	Remark
64	* 4-943-604-51	PANEL (B3120), BACK (E2, E3)	
64	* 4-943-604-61	PANEL (B3120), BACK (EA)	
64	* 4-943-604-71	PANEL (B3120), BACK (AUS)	
65	* 4-912-181-21	SUPPORT, PC	
66	* 2-379-614-01	HOOK	
CN1	⚠ 1-526-882-00	OUTLET, AC (E2, E3)	
CN1	⚠ 1-526-794-11	OUTLET, AC (EA)	
CN1	⚠ 1-540-196-11	OUTLET, AC (AUS)	
F1	⚠ 1-532-388-51	FUSE (T2A)	
F2	⚠ 1-532-388-51	FUSE (T2A)	
F901	⚠ 1-532-388-51	FUSE (T2A)	
F902	⚠ 1-532-388-51	FUSE (T2A)	
S2	⚠ 1-570-307-11	SWITCH, VOLTAGE CHANGE	
T1	⚠ 1-450-480-11	TRANSFORMER, POWER	

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

SECTION 4
ELECTRICAL PARTS LIST

MAIN POWER TRANS CON.

EA : Saudi Arabia
AUS : Australian

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- −XX, −X mean standardized parts, so they may have some differences from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA··· : μA···, uPA··· : μPA···,
  uPB··· : μPB···, uPC··· : μPC···,
  uPD··· : μPD···
- CAPACITORS
  uF : μF
- COILS
  uH : μH

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref. No.	Part No.	Description			Remark
	* A-4341-954-A	MAIN BOARD, COMPLETE			
		*******************			
	* 1-639-065-11	POWER BOARD			
		***********			
	* 1-639-066-11	TRANS CON. BOARD			
		****************			
	* 1-533-213-31	HOLDER, FUSE			
	* 1-533-213-31	HOLDER, FUSE			
	* 4-942-204-01	PLATE, GROUND			
	7-682-548-04	SCREW +BVTT 3X8 (S)			
		< CAPACITOR >			
C1	1-161-744-00	CERAMIC	0.01uF		400V
C102	1-124-257-00	ELECT	2.2uF	20%	50V
C103	1-162-282-31	CERAMIC	100PF	10%	50V
C104	1-162-219-31	CERAMIC	68PF	5%	50V
C105	1-124-910-11	ELECT	47uF	20%	50V
C106	1-130-480-00	MYLAR	0.0056uF	5%	50V
C107	1-130-473-00	MYLAR	0.0015uF	5%	50V
C108	1-124-464-11	ELECT	0.22uF	20%	50V
C109	1-124-910-11	ELECT	47uF	20%	50V
C111	1-124-257-00	ELECT	2.2uF	20%	50V
C113	1-126-161-11	ELECT	2.2uF	20%	50V
C115	1-126-161-11	ELECT	2.2uF	20%	50V
C122	1-126-059-11	ELECT	10uF	20%	50V
C123	1-162-219-31	CERAMIC	68PF	5%	50V
C124	1-162-207-31	CERAMIC	22PF	5%	50V
C125	1-126-161-11	ELECT	2.2uF	20%	50V
C135	1-124-463-00	ELECT	0.1uF	20%	50V
C136	1-126-301-11	ELECT	1uF	20%	50V
C138	1-124-910-11	ELECT	47uF	20%	50V
C202	1-124-257-00	ELECT	2.2uF	20%	50V
C203	1-162-282-31	CERAMIC	100PF	10%	50V
C204	1-162-219-31	CERAMIC	68PF	5%	50V
C205	1-124-910-11	ELECT	47uF	20%	50V
C206	1-130-480-00	MYLAR	0.0056uF	5%	50V
C207	1-130-473-00	MYLAR	0.0015uF	5%	50V
C208	1-124-464-11	ELECT	0.22uF	20%	50V
C209	1-124-910-11	ELECT	47uF	20%	50V
C211	1-124-257-00	ELECT	2.2uF	20%	50V
C213	1-126-161-11	ELECT	2.2uF	20%	50V
C215	1-126-161-11	ELECT	2.2uF	20%	50V
C222	1-126-059-11	ELECT	10uF	20%	50V
C223	1-162-219-31	CERAMIC	68PF	5%	50V
C224	1-162-207-31	CERAMIC	22PF	5%	50V
C225	1-126-161-11	ELECT	2.2uF	20%	50V
C238	1-124-910-11	ELECT	47uF	20%	50V
C409	1-162-306-11	CERAMIC	0.01uF	20%	16V
C501	1-126-059-11	ELECT	10uF	20%	50V
C502	1-162-282-31	CERAMIC	100PF	10%	50V
C503	1-162-286-31	CERAMIC	220PF	10%	50V
C504	1-126-101-11	ELECT	100uF	20%	16V
C505	1-124-572-11	ELECT	100uF	20%	63V
C506	1-124-910-11	ELECT	47uF	20%	50V
C507	1-126-059-11	ELECT	10uF	20%	63V
C508	1-130-493-00	MYLAR	0.068uF	5%	50V
C509	1-130-493-00	MYLAR	0.068uF	5%	50V
C551	1-126-059-11	ELECT	10uF	20%	50V
C552	1-162-282-31	CERAMIC	100PF	10%	50V
C553	1-162-286-31	CERAMIC	220PF	10%	50V
C554	1-126-101-11	ELECT	100uF	20%	16V
C555	1-124-572-11	ELECT	100uF	20%	63V
C556	1-124-910-11	ELECT	47uF	20%	50V
C557	1-161-494-00	CERAMIC	0.022uF		25V
C558	1-130-493-00	MYLAR	0.068uF	5%	50V
C559	1-130-493-00	MYLAR	0.068uF	5%	50V

MAIN POWER TRANS CON.

Ref. No.	Part No.	Description	Remark
C601	1-126-101-11	ELECT 100uF 20% 16V	
C602	1-126-101-11	ELECT 100uF 20% 16V	
C603	1-126-163-11	ELECT 4.7uF 20% 50V	
C604	1-124-994-11	ELECT 100uF 20% 10V	
C901	1-126-258-11	ELECT 4700uF 20% 56V	
C902	1-126-258-11	ELECT 4700uF 20% 56V	
C905	1-124-920-11	ELECT 330uF 20% 63V	
C906	1-126-233-11	ELECT 22uF 20% 50V	
C907	1-124-122-11	ELECT 100uF 20% 50V	
C908	1-124-994-11	ELECT 100uF 20% 10V	
C909	1-126-027-11	ELECT 1000uF 20% 25V	
C910	1-126-027-11	ELECT 1000uF 20% 25V	
C911	1-124-910-11	ELECT 47uF 20% 50V	
C912	1-124-910-11	ELECT 47uF 20% 50V	
C913	1-126-023-11	ELECT 100uF 20% 16V	
C914	1-126-023-11	ELECT 100uF 20% 16V	
C915	1-124-910-11	ELECT 47uF 20% 50V	
C916	1-124-463-00	ELECT 0.1uF 20% 50V	
C917	1-130-491-00	MYLAR 0.047uF 5% 50V	
C918	1-126-059-11	ELECT 10uF 20% 50V	
		< CONNECTOR >	
CN101	* 1-566-858-41	SOCKET, CONNECTOR 11P	
CN701	* 1-568-841-11	SOCKET, CONNECTOR 25P	
CN901	* 1-566-859-11	SOCKET, CONNECTOR 15P	
CNJ501	* 1-569-491-11	SOCKET, CONNECTOR 5P	
CNJ601	1-569-492-11	SOCKET, CONNECTOR 6P	
CNP1	* 1-564-321-00	PIN, CONNECTOR 2P	
CNP301	* 1-565-344-11	PIN, CONNECTOR (PC BOARD) 8P	
CNP401	* 1-565-344-11	PIN, CONNECTOR (PC BOARD) 8P	
		< CERAMIC >	
CP901	1-102-394-11	CERAMIC 0.01uF 250V	
CP902	1-102-394-11	CERAMIC 0.01uF 250V	
		< DIODE >	
D501	8-719-815-85	DIODE 1S1585	
D551	8-719-815-85	DIODE 1S1585	
D601	8-719-815-85	DIODE 1S1585	
D602	8-719-815-85	DIODE 1S1585	
D603	8-719-815-85	DIODE 1S1585	
D604	8-719-815-85	DIODE 1S1585	
D710	8-719-815-85	DIODE 1S1585	
D712	8-719-000-84	DIODE UZL-7M1	
D901	8-719-302-38	DIODE RBV-602-01	
D902	8-719-200-77	DIODE 10E2N	
D903	8-719-002-67	DIODE UZL-33H	
D904	8-719-014-88	DIODE UZP-6.8BC	
D905	8-719-200-77	DIODE 10E2N	
D906	8-719-200-77	DIODE 10E2N	
D907	8-719-200-77	DIODE 10E2N	
D908	8-719-200-77	DIODE 10E2N	
D909	8-719-200-77	DIODE 10E2N	
D910	8-719-200-77	DIODE 10E2N	
		< IC >	
IC101	8-759-634-50	IC M5218LA	
IC102	8-759-805-13	IC LC7821	
IC103	8-759-634-50	IC M5218AL	
IC104	8-759-801-01	IC LC4066	
IC105	8-759-801-01	IC LC4066	
IC501	8-749-920-90	IC STK4201MK2	
IC601	8-759-111-68	IC uPC1237HA	
IC901	8-759-604-32	IC M5F7810L	
IC902	8-759-604-50	IC M5F7910L	
IC903	8-759-820-13	IC L78MR06	
		< JACK >	
J101	1-565-352-11	JACK, PIN 2P (PHONO)	
J102	1-565-320-11	JACK, PIN 6P (CD EQUALIZER)	
J103	1-565-258-11	JACK, PIN 4P (VIDEO 2)	
J104	1-565-258-11	JACK, PIN 4P (VIDEO 1/DAT)	
J502	1-565-352-11	JACK, PIN 2P (SURROUND SPEAKER)	
		< COIL >	
L501	* 1-420-872-00	COIL, AIR CORE	
L551	* 1-420-872-00	COIL, AIR CORE	
		< TRANSISTOR >	
Q103	8-729-900-36	TRANSISTOR DTC124ES	
Q104	8-729-900-63	TRANSISTOR DTA124ES	
Q105	8-729-900-63	TRANSISTOR DTA124ES	
Q106	8-729-900-63	TRANSISTOR DTA124ES	
Q501	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q551	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q601	8-729-900-63	TRANSISTOR DTA124ES	
Q901	8-729-111-67	TRANSISTOR 2SB1094-L	
		< RESISTOR >	
R102	1-249-441-11	CARBON 100K 5% 1/4W	
R103	1-249-417-11	CARBON 1K 5% 1/4W	
R104	1-249-441-11	CARBON 100K 5% 1/4W	
R105	1-249-416-11	CARBON 820 5% 1/4W	
R106	1-247-897-11	CARBON 560K 5% 1/4W	
R107	1-249-437-11	CARBON 47K 5% 1/4W	

MAIN POWER TRANS CON.

Ref. No.	Part No.	Description				Remark
R108	1-249-441-11	CARBON	100K	5%	1/4W	
R109	1-249-417-11	CARBON	1K	5%	1/4W	
R110	1-249-409-11	CARBON	220	5%	1/4W	
R111	1-249-417-11	CARBON	1K	5%	1/4W	
R112	1-247-903-00	CARBON	1M	5%	1/4W	
R113	1-249-417-11	CARBON	1K	5%	1/4W	
R114	1-247-903-00	CARBON	1M	5%	1/4W	
R115	1-249-417-11	CARBON	1K	5%	1/4W	
R116	1-247-903-00	CARBON	1M	5%	1/4W	
R119	1-249-413-11	CARBON	470	5%	1/4W	
R120	1-247-903-00	CARBON	1M	5%	1/4W	
R121	1-249-413-11	CARBON	470	5%	1/4W	
R122	1-247-903-00	CARBON	1M	5%	1/4W	
R123	1-249-413-11	CARBON	470	5%	1/4W	
R124	1-247-903-00	CARBON	1M	5%	1/4W	
R125	1-249-417-11	CARBON	1K	5%	1/4W	
R126	1-247-903-00	CARBON	1M	5%	1/4W	
R127	1-249-417-11	CARBON	1K	5%	1/4W	
R128	1-247-903-00	CARBON	1M	5%	1/4W	
R129	1-249-417-11	CARBON	1K	5%	1/4W	
R130	1-247-903-00	CARBON	1M	5%	1/4W	
R131	1-247-903-00	CARBON	1M	5%	1/4W	
R132	1-249-438-11	CARBON	56K	5%	1/4W	
R133	1-249-438-11	CARBON	56K	5%	1/4W	
R134	1-247-903-00	CARBON	1M	5%	1/4W	
R135	1-249-438-11	CARBON	56K	5%	1/4W	
R148	1-249-433-11	CARBON	22K	5%	1/4W	
R149	1-249-441-11	CARBON	100K	5%	1/4W	
R150	1-249-417-11	CARBON	1K	5%	1/4W	
R151	1-249-417-11	CARBON	1K	5%	1/4W	
R152	1-249-417-11	CARBON	1K	5%	1/4W	
R153	1-249-433-11	CARBON	22K	5%	1/4W	
R154	1-249-433-11	CARBON	22K	5%	1/4W	
R155	1-249-417-11	CARBON	1K	5%	1/4W	
R156	1-249-433-11	CARBON	22K	5%	1/4W	
R157	1-249-417-11	CARBON	1K	5%	1/4W	
R162	1-249-417-11	CARBON	1K	5%	1/4W	
R202	1-249-441-11	CARBON	100K	5%	1/4W	
R203	1-249-417-11	CARBON	1K	5%	1/4W	
R204	1-249-441-11	CARBON	100K	5%	1/4W	
R205	1-249-416-11	CARBON	820	5%	1/4W	
R206	1-247-897-11	CARBON	560K	5%	1/4W	
R207	1-249-437-11	CARBON	47K	5%	1/4W	
R208	1-249-441-11	CARBON	100K	5%	1/4W	
R209	1-249-417-11	CARBON	1K	5%	1/4W	
R210	1-249-409-11	CARBON	220	5%	1/4W	
R211	1-249-417-11	CARBON	1K	5%	1/4W	
R212	1-247-903-00	CARBON	1M	5%	1/4W	
R213	1-249-417-11	CARBON	1K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R214	1-247-903-00	CARBON	1M	5%	1/4W	
R215	1-249-417-11	CARBON	1K	5%	1/4W	
R216	1-247-903-00	CARBON	1M	5%	1/4W	
R219	1-249-413-11	CARBON	470	5%	1/4W	
R220	1-247-903-00	CARBON	1M	5%	1/4W	
R221	1-249-413-11	CARBON	470	5%	1/4W	
R222	1-247-903-00	CARBON	1M	5%	1/4W	
R223	1-249-413-11	CARBON	470	5%	1/4W	
R224	1-247-903-00	CARBON	1M	5%	1/4W	
R225	1-249-417-11	CARBON	1K	5%	1/4W	
R226	1-247-903-00	CARBON	1M	5%	1/4W	
R227	1-249-417-11	CARBON	1K	5%	1/4W	
R228	1-247-903-00	CARBON	1M	5%	1/4W	
R229	1-249-417-11	CARBON	1K	5%	1/4W	
R230	1-247-903-00	CARBON	1M	5%	1/4W	
R231	1-247-903-00	CARBON	1M	5%	1/4W	
R232	1-249-438-11	CARBON	56K	5%	1/4W	
R233	1-249-438-11	CARBON	56K	5%	1/4W	
R234	1-247-903-00	CARBON	1M	5%	1/4W	
R235	1-249-438-11	CARBON	56K	5%	1/4W	
R501	1-249-417-11	CARBON	1K	5%	1/4W	
R502	1-249-438-11	CARBON	56K	5%	1/4W	
R503	1-249-413-11	CARBON	470	5%	1/4W	
R504	1-249-438-11	CARBON	56K	5%	1/4W	
R505	1-247-760-11	CARBON	4.7K	5%	1/2W	
R506	1-247-760-11	CARBON	4.7K	5%	1/2W	
R507	⚠ 1-212-881-11	FUSIBLE	100	5%	1/4W	F
R508	1-247-752-11	CARBON	1K	5%	1/2W	
R509	1-247-752-11	CARBON	1K	5%	1/2W	
R510	1-249-417-11	CARBON	1K	5%	1/4W	
R511	1-249-431-11	CARBON	15K	5%	1/4W	
R512	1-217-156-00	RES, METAL PLATE 0.22				
R513	1-249-441-11	CARBON	100K	5%	1/4W	
R514	1-249-438-11	CARBON	56K	5%	1/4W	
R515	1-247-727-11	CARBON	10	5%	1/2W	
R516	1-247-727-11	CARBON	10	5%	1/2W	
R551	1-249-417-11	CARBON	1K	5%	1/4W	
R552	1-249-438-11	CARBON	56K	5%	1/4W	
R553	1-249-413-11	CARBON	470	5%	1/4W	
R554	1-249-438-11	CARBON	56K	5%	1/4W	
R555	1-247-760-11	CARBON	4.7K	5%	1/2W	
R556	1-247-760-11	CARBON	4.7K	5%	1/2W	
R557	⚠ 1-212-881-11	FUSIBLE	100	5%	1/4W	F
R560	1-249-417-11	CARBON	1K	5%	1/4W	
R561	1-249-431-11	CARBON	15K	5%	1/4W	
R562	1-217-156-00	RES, METAL PLATE 0.22				
R563	1-249-441-11	CARBON	100K	5%	1/4W	
R564	1-249-437-11	CARBON	47K	5%	1/4W	
R565	1-247-727-11	CARBON	10	5%	1/2W	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

MAIN **POWER** **TRANS CON.** **PANEL** **MICOM** **VIDEO**
MAIN VOL **ROTARY F SW** **DBFB VOL** **MICOM CON.**
SP SW **MIC** **VIDEO 3** **VIDEO 3 CON.** **VIDEO CON.**
SP CON. (B) **SP CON. (C)**

Ref. No.		Part No.	Description				Remark
R566		1-247-727-11	CARBON	10	5%	1/2W	
R601		1-249-429-11	CARBON	10K	5%	1/4W	
R602		1-249-441-11	CARBON	100K	5%	1/4W	
R603		1-249-433-11	CARBON	22K	5%	1/4W	
R604		1-249-437-11	CARBON	47K	5%	1/4W	
R605		1-249-487-11	CARBON	15K	5%	1/2W	
R606	⚠	1-216-457-00	METAL OXIDE	1.2K	5%	2W	F
R901		1-214-789-00	RES, METAL PLATE	0.1			
R902		1-214-789-00	RES, METAL PLATE	0.1			
R903		1-214-789-00	RES, METAL PLATE	0.1			
R904		1-214-789-00	RES, METAL PLATE	0.1			
R905		1-214-789-00	RES, METAL PLATE	0.1			
R906		1-214-789-00	RES, METAL PLATE	0.1			
R907		1-249-422-11	CARBON	2.7K	5%	1/4W	
R908		1-247-761-11	CARBON	5.6K	5%	1/2W	
R909	⚠	1-217-469-00	FUSIBLE	1	5%	1W	F
R910	⚠	1-217-469-00	FUSIBLE	1	5%	1W	F
R950		1-247-713-11	CARBON	1K	5%	1/4W	
			< RELAY >				
RY601		1-515-765-11	RELAY				
			< SWITCH >				
S1	⚠	1-554-920-51	SWITCH, PUSH (AC POWER) (1 KEY)				
			< TERMINAL >				
TM1	*	1-535-142-00	BASE POST 19MM (10MM PITCH) 5P				
TM501		1-536-706-00	TERMINAL BOARD (SP)				

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Ref. No.		Part No.	Description				Remark
	*	A-4341-960-A	PANEL BOARD, COMPLETE (E3, EA)				
	*	A-4341-961-A	PANEL BOARD, COMPLETE (E2, AUS)				
			******************************				
	*	A-4341-964-A	MICOM BOARD, COMPLETE (E3, EA)				
	*	A-4341-965-A	MICOM BOARD, COMPLETE (E2, AUS)				
			******************************				
	*	A-4341-972-A	VIDEO BOARD, COMPLETE				
			*********************				
	*	1-639-082-11	MAIN VOL BOARD				
			**************				
	*	1-639-083-11	ROTARY F SW BOARD				
			*****************				
	*	1-639-085-11	DBFB VOL BOARD				
			**************				
	*	1-639-086-11	MICOM CON. BOARD				
			****************				
	*	1-639-088-11	SP SW BOARD				
			***********				
	*	1-639-089-11	MIC BOARD				
			*********				
	*	1-639-090-11	VIDEO 3 BOARD				
			*************				
	*	1-639-091-11	VIDEO 3 CON. BOARD				
			******************				
	*	1-639-092-11	VIDEO CON. BOARD				
			****************				
	*	1-639-095-11	SP CON. (B) BOARD				
			*****************				
	*	1-639-096-11	SP CON. (C) BOARD				
			*****************				
			< CAPACITOR >				
C117		1-126-161-11	ELECT	2.2uF	20%	50V	
C126		1-130-473-00	MYLAR	0.0015uF	5%	50V	
C127		1-130-484-00	MYLAR	0.012uF	5%	50V	
C128		1-130-484-00	MYLAR	0.012uF	5%	50V	
C129		1-162-219-31	CERAMIC	68PF	5%	50V	
C130		1-162-282-31	CERAMIC	100PF	10%	50V	
C131		1-126-161-11	ELECT	2.2uF	20%	50V	
C132		1-136-169-00	FILM	0.22uF	5%	50V	
C134		1-124-465-00	ELECT	0.47uF	20%	50V	
C137		1-124-910-11	ELECT	47uF	20%	50V	
C217		1-126-161-11	ELECT	2.2uF	20%	50V	
C226		1-130-473-00	MYLAR	0.0015uF	5%	50V	
C227		1-130-484-00	MYLAR	0.012uF	5%	50V	
C228		1-130-484-00	MYLAR	0.012uF	5%	50V	
C229		1-162-219-31	CERAMIC	68PF	5%	50V	
C230		1-162-282-31	CERAMIC	100PF	10%	50V	
C231		1-126-161-11	ELECT	2.2uF	20%	50V	
C232		1-136-169-00	FILM	0.22uF	5%	50V	
C234		1-124-465-00	ELECT	0.47uF	20%	50V	
C237		1-124-910-11	ELECT	47uF	20%	50V	
C301		1-124-257-00	ELECT	2.2uF	20%	50V	
C302		1-162-294-31	CERAMIC	0.001uF	10%	50V	
C303		1-162-219-31	CERAMIC	68PF	5%	50V	
C304		1-162-284-31	CERAMIC	150PF	10%	50V	
C305		1-124-463-00	ELECT	0.1uF	20%	50V	
C306		1-124-257-00	ELECT	2.2uF	20%	50V	
C307		1-162-219-31	CERAMIC	68PF	5%	50V	
C308		1-161-375-00	CERAMIC	0.0022uF	20%	50V	
C309		1-130-493-00	MYLAR	0.068uF	5%	50V	
C310		1-124-234-00	ELECT	22uF	20%	16V	
C311		1-124-234-00	ELECT	22uF	20%	16V	
C401		1-126-059-11	ELECT	10uF	20%	50V	
C402		1-126-059-11	ELECT	10uF	20%	50V	
C403		1-126-059-11	ELECT	10uF	20%	50V	
C404		1-124-471-00	ELECT	1000uF	20%	6.3V	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

PANEL MICOM VIDEO MAIN VOL ROTARY F SW
DBFB VOL MICOM CON. SP SW MIC VIDEO 3
VIDEO 3 CON. VIDEO CON. SP CON. (B) SP CON. (C)

Ref. No.	Part No.	Description				Remark
C405	1-124-471-00	ELECT	1000uF	20%	6.3V	
C406	1-124-471-00	ELECT	1000uF	20%	6.3V	
C407	1-161-494-00	CERAMIC	0.022uF		25V	
C408	1-126-049-11	ELECT	22uF	20%	25V	
C701	1-161-494-00	CERAMIC	0.022uF		25V	
C702	1-161-494-00	CERAMIC	0.022uF		25V	
C703	1-161-494-00	CERAMIC	0.022uF		25V	
C704	1-124-638-11	ELECT	22uF	20%	10V	
C705	1-126-154-11	ELECT	47uF	20%	6.3V	
C706	1-161-494-00	CERAMIC	0.022uF		25V	
C707	1-126-154-11	ELECT	47uF	20%	6.3V	
C708	1-161-494-00	CERAMIC	0.022uF		25V	
C709	1-136-165-00	FILM	0.1uF	5%	50V	
C710	1-136-153-00	FILM	0.01uF	5%	50V	
C711	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C712	1-161-494-00	CERAMIC	0.022uF		25V	
C713	1-126-059-11	ELECT	10uF	20%	50V	
C714	1-161-494-00	CERAMIC	0.022uF		25V	
C715	1-161-494-00	CERAMIC	0.022uF		25V	
C716	1-126-049-11	ELECT	22uF	20%	25V	
C717	1-161-494-00	CERAMIC	0.022uF		25V	
C718	1-126-022-11	ELECT	47uF	20%	16V	
C719	1-161-494-00	CERAMIC	0.022uF		25V	
C720	1-125-507-11	CAP, DOUBLE LAYERS 0.22F				
C721	1-164-159-11	CERAMIC	0.1uF		50V	
		< VIBRATOR >				
CF701	1-577-359-21	VIBRATOR, CERAMIC				
		< CONNECTOR >				
CN702	* 1-568-841-11	SOCKET, CONNECTOR 25P				
CNJ201	* 1-565-364-11	HOUSING, CONNECTOR (PC BOARD) 11P				
CNJ301	* 1-565-347-11	SOCKET, CONNECTOR (PC BOARD) 8P				
CNJ401	* 1-565-347-11	SOCKET, CONNECTOR (PC BOARD) 8P				
CNJ502	1-569-497-11	SOCKET, CONNECTOR 11P				
CNP201	* 1-565-365-11	PIN, CONNECTOR (PC BOARD) 11P				
CNP501	* 1-569-500-11	PIN, CONNECTOR 5P				
CNP502	* 1-569-506-11	PIN, CONNECTOR 11P				
CNP601	* 1-569-501-11	PIN, CONNECTOR 6P				
		< DIODE >				
D401	8-719-200-77	DIODE 10E2N				
D701	8-719-301-37	DIODE SEL2210S-CD				
D702	8-719-301-37	DIODE SEL2210S-CD				
D703	8-719-301-37	DIODE SEL2210S-CD				
D704	8-719-301-37	DIODE SEL2210S-CD (E3, EA)				
D705	8-719-301-37	DIODE SEL2210S-CD (E3, EA)				

Ref. No.	Part No.	Description	Remark
D706	8-719-301-37	DIODE SEL2210S-CD (E3, EA)	
D707	8-719-200-77	DIODE 10E2N	
D708	8-719-200-77	DIODE 10E2N	
D709	8-719-200-77	DIODE 10E2N	
D711	8-719-912-20	DIODE 1SS120	
D713	8-719-912-20	DIODE 1SS120	
D714	8-719-200-77	DIODE 10E2N	
D715	8-719-200-77	DIODE 10E2N	
D716	8-719-200-82	DIODE 11ES2	
D717	8-719-200-82	DIODE 11ES2	
D718	8-719-200-82	DIODE 11ES2	
D719	8-719-200-77	DIODE 10E2N	
D720	8-719-912-20	DIODE 1SS120	
D721	8-719-912-20	DIODE 1SS120	
D722	8-719-912-20	DIODE 1SS120	
D723	8-719-912-20	DIODE 1SS120	
		< IC >	
IC106	8-759-801-01	IC LC4966	
IC107	8-759-801-01	IC LC4966	
IC108	8-759-634-50	IC M5218AL	
IC109	8-759-634-50	IC M5218AL	
IC301	8-759-710-73	IC NJM4580L	
IC401	8-759-991-77	IC BA7625	
IC701	8-759-153-82	IC uPD75106CW-191	
IC702	8-759-962-08	IC BA6208	
IC703	8-759-962-08	IC BA6208	
IC704	8-759-208-06	IC TC4051BPHB	
IC705	8-759-208-06	IC TC4051BPHB	
IC706	8-759-991-02	IC NE555P	
IC707	8-759-820-62	IC LB1639	
		< JACK >	
J105	1-580-174-41	JACK, PIN (3P FRONT) (VIDEO 3)	
J301	1-507-854-00	JACK, PHONE (MIC)	
J401	1-565-934-11	JACK, PIN 2P (VIDEO 2)	
J402	1-565-933-11	JACK, PIN 3P (VIDEO 1/DAT, MONITOR)	
J501	1-507-796-71	JACK (HEADPHONES)	
		< COIL >	
L401	1-410-521-11	INDUCTOR 100uH	
		< TRANSISTOR >	
Q101	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q102	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q107	8-729-900-36	TRANSISTOR DTC124ES	
Q108	8-729-900-63	TRANSISTOR DTA124ES	
Q109	8-729-900-63	TRANSISTOR DTA124ES	
Q110	8-729-900-63	TRANSISTOR DTA124ES	

PANEL MICOM VIDEO MAIN VOL ROTARY F SW DBFB VOL MICOM CON. SP SW MIC VIDEO 3 VIDEO 3 CON. VIDEO CON. SP CON. (B) SP CON. (C)

Ref. No.	Part No.	Description				Remark
Q201	8-729-620-05	TRANSISTOR 2SC2603-EF				
Q202	8-729-141-26	TRANSISTOR 2SC3622A-LK				
Q401	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q402	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q403	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q404	8-729-620-05	TRANSISTOR 2SC2603-EF				
Q701	8-729-900-36	TRANSISTOR DTC124ES				
Q702	8-729-900-63	TRANSISTOR DTA124ES				
Q703	8-729-900-36	TRANSISTOR DTC124ES				
Q704	8-729-900-63	TRANSISTOR DTA124ES				
Q705	8-729-900-63	TRANSISTOR DTA124ES				
Q706	8-729-620-05	TRANSISTOR 2SC2603-EF				
Q707	8-729-900-36	TRANSISTOR DTC124ES				
		< RESISTOR >				
R117	1-249-417-11	CARBON	1K	5%	1/4W	
R118	1-247-903-00	CARBON	1M	5%	1/4W	
R136	1-249-428-11	CARBON	8.2K	5%	1/4W	
R137	1-249-435-11	CARBON	33K	5%	1/4W	
R138	1-249-435-11	CARBON	33K	5%	1/4W	
R139	1-247-903-00	CARBON	1M	5%	1/4W	
R140	1-249-417-11	CARBON	1K	5%	1/4W	
R141	1-249-433-11	CARBON	22K	5%	1/4W	
R142	1-249-425-11	CARBON	4.7K	5%	1/4W	
R143	1-249-424-11	CARBON	3.9K	5%	1/4W	
R144	1-249-441-11	CARBON	100K	5%	1/4W	
R145	1-249-427-11	CARBON	6.8K	5%	1/4W	
R146	1-249-412-11	CARBON	390	5%	1/4W	
R147	1-249-429-11	CARBON	10K	5%	1/4W	
R158	1-249-433-11	CARBON	22K	5%	1/4W	
R159	1-249-433-11	CARBON	22K	5%	1/4W	
R160	1-249-429-11	CARBON	10K	5%	1/4W	
R161	1-249-441-11	CARBON	100K	5%	1/4W	
R217	1-249-417-11	CARBON	1K	5%	1/4W	
R218	1-247-903-00	CARBON	1M	5%	1/4W	
R236	1-249-428-11	CARBON	8.2K	5%	1/4W	
R237	1-249-435-11	CARBON	33K	5%	1/4W	
R238	1-249-435-11	CARBON	33K	5%	1/4W	
R239	1-247-903-00	CARBON	1M	5%	1/4W	
R240	1-249-417-11	CARBON	1K	5%	1/4W	
R241	1-249-433-11	CARBON	22K	5%	1/4W	
R242	1-249-425-11	CARBON	4.7K	5%	1/4W	
R243	1-249-424-11	CARBON	3.9K	5%	1/4W	
R244	1-249-441-11	CARBON	100K	5%	1/4W	
R245	1-249-427-11	CARBON	6.8K	5%	1/4W	
R246	1-249-412-11	CARBON	390	5%	1/4W	
R247	1-249-429-11	CARBON	10K	5%	1/4W	
R301	1-249-441-11	CARBON	100K	5%	1/4W	
R302	1-249-417-11	CARBON	1K	5%	1/4W	
R303	1-249-429-11	CARBON	10K	5%	1/4W	
R304	1-249-412-11	CARBON	390	5%	1/4W	
R305	1-249-429-11	CARBON	10K	5%	1/4W	
R306	1-249-417-11	CARBON	1K	5%	1/4W	
R307	1-249-441-11	CARBON	100K	5%	1/4W	
R308	1-249-417-11	CARBON	1K	5%	1/4W	
R309	1-249-429-11	CARBON	10K	5%	1/4W	
R310	1-249-416-11	CARBON	820	5%	1/4W	
R401	1-247-804-11	CARBON	75	5%	1/4W	
R402	1-247-804-11	CARBON	75	5%	1/4W	
R403	1-247-804-11	CARBON	75	5%	1/4W	
R404	1-249-403-11	CARBON	68	5%	1/4W	
R405	1-249-429-11	CARBON	10K	5%	1/4W	
R406	1-249-403-11	CARBON	68	5%	1/4W	
R407	1-249-429-11	CARBON	10K	5%	1/4W	
R408	1-249-403-11	CARBON	68	5%	1/4W	
R409	1-249-429-11	CARBON	10K	5%	1/4W	
R410	1-249-408-11	CARBON	180	5%	1/4W	
R411	1-249-408-11	CARBON	180	5%	1/4W	
R412	1-249-408-11	CARBON	180	5%	1/4W	
R413	1-249-408-11	CARBON	180	5%	1/4W	
R414	1-249-408-11	CARBON	180	5%	1/4W	
R415	1-249-408-11	CARBON	180	5%	1/4W	
R416	1-249-429-11	CARBON	10K	5%	1/4W	
R417	1-249-417-11	CARBON	1K	5%	1/4W	
R418	1-249-433-11	CARBON	22K	5%	1/4W	
R419	1-249-417-11	CARBON	1K	5%	1/4W	
R420	1-249-433-11	CARBON	22K	5%	1/4W	
R517	1-247-750-11	CARBON	680	5%	1/2W	
R567	1-247-750-11	CARBON	680	5%	1/2W	
R701	1-249-433-11	CARBON	22K	5%	1/4W	
R702	1-249-417-11	CARBON	1K	5%	1/4W	
R703	1-249-429-11	CARBON	10K	5%	1/4W	
R704	1-249-429-11	CARBON	10K	5%	1/4W	
R705	1-249-429-11	CARBON	10K	5%	1/4W	
R706	1-249-429-11	CARBON	10K	5%	1/4W	
R707	1-249-429-11	CARBON	10K	5%	1/4W	
R708	1-249-433-11	CARBON	22K	5%	1/4W	
R709	1-249-433-11	CARBON	22K	5%	1/4W	
R710	1-249-433-11	CARBON	22K	5%	1/4W	
R711	1-249-433-11	CARBON	22K	5%	1/4W	
R712	1-249-433-11	CARBON	22K	5%	1/4W	
R713	1-249-433-11	CARBON	22K	5%	1/4W	
R714	1-249-433-11	CARBON	22K	5%	1/4W	
R715	1-249-433-11	CARBON	22K	5%	1/4W	
R716	1-249-433-11	CARBON	22K	5%	1/4W	
R717	1-249-429-11	CARBON	10K	5%	1/4W	
R718	1-249-410-11	CARBON	270	5%	1/4W	
R719	1-249-409-11	CARBON	220	5%	1/4W	

PANEL MICOM VIDEO MAIN VOL ROTARY F SW DBFB VOL MICOM CON. SP SW MIC VIDEO 3 VIDEO 3 CON. VIDEO CON. SP CON. (B) SP CON. (C)

Ref. No.	Part No.	Description	Remark
R720	1-249-410-11	CARBON 270 5%	1/4W
R721	1-249-410-11	CARBON 270 5%	1/4W
R722	1-249-421-11	CARBON 2.2K 5%	1/4W
R723	1-249-421-11	CARBON 2.2K 5%	1/4W
R724	1-249-421-11	CARBON 2.2K 5%	1/4W
R725	1-249-421-11	CARBON 2.2K 5%	1/4W
R726	1-249-412-11	CARBON 390 5%	1/4W(E3, EA)
R727	1-249-412-11	CARBON 390 5%	1/4W(E3, EA)
R728	1-249-412-11	CARBON 390 5%	1/4W(E3, EA)
R729	1-249-415-11	CARBON 680 5%	1/4W
R730	1-249-421-11	CARBON 2.2K 5%	1/4W
R731	1-249-429-11	CARBON 10K 5%	1/4W
R732	1-249-421-11	CARBON 2.2K 5%	1/4W
R733	1-249-429-11	CARBON 10K 5%	1/4W
R734	1-249-429-11	CARBON 10K 5%	1/4W
R735	1-249-429-11	CARBON 10K 5%	1/4W
R736	1-249-429-11	CARBON 10K 5%	1/4W
R737	1-249-429-11	CARBON 10K 5%	1/4W
R738	1-249-429-11	CARBON 10K 5%	1/4W
R739	1-249-429-11	CARBON 10K 5%	1/4W
R740	1-249-429-11	CARBON 10K 5%	1/4W
R741	1-249-429-11	CARBON 10K 5%	1/4W
R742	1-249-415-11	CARBON 680 5%	1/4W
R743	1-249-438-11	CARBON 56K 5%	1/4W
R744	1-247-885-00	CARBON 180K 5%	1/4W
R745	1-249-429-11	CARBON 10K 5%	1/4W
R746	1-249-417-11	CARBON 1K 5%	1/4W
R747	1-249-417-11	CARBON 1K 5%	1/4W
R748	1-249-433-11	CARBON 22K 5%	1/4W
R749	1-249-424-11	CARBON 3.9K 5%	1/4W
R750	1-249-429-11	CARBON 10K 5%	1/4W
R751	1-249-425-11	CARBON 4.7K 5%	1/4W
R752	1-249-429-11	CARBON 10K 5%	1/4W
R753	1-249-417-11	CARBON 1K 5%	1/4W
R754	1-247-903-00	CARBON 1M 5%	1/4W
R755	1-249-417-11	CARBON 1K 5%	1/4W
R756	1-249-415-11	CARBON 680 5%	1/4W
R757	1-249-419-11	CARBON 1.5K 5%	1/4W
R758	1-249-417-11	CARBON 1K 5%	1/4W
R759	1-249-417-11	CARBON 1K 5%	1/4W
R760	1-249-417-11	CARBON 1K 5%	1/4W
R761	1-249-417-11	CARBON 1K 5%	1/4W
R762	1-249-417-11	CARBON 1K 5%	1/4W
R763	1-249-433-11	CARBON 22K 5%	1/4W
R764	1-249-433-11	CARBON 22K 5%	1/4W
R765	1-249-433-11	CARBON 22K 5%	1/4W
R766	1-249-433-11	CARBON 22K 5%	1/4W
R767	1-249-417-11	CARBON 1K 5%	1/4W
R768	1-249-417-11	CARBON 1K 5%	1/4W

Ref. No.	Part No.	Description	Remark
R769	1-249-417-11	CARBON 1K 5%	1/4W
R770	1-249-429-11	CARBON 10K 5%	1/4W
R771	1-249-417-11	CARBON 1K 5%	1/4W
R772	1-249-417-11	CARBON 1K 5%	1/4W
R773	1-249-417-11	CARBON 1K 5%	1/4W

< VARIABLE RESISTOR >

RV101	1-238-978-11	RES, VAR, CARBON 100KX2 (TREBLE)	
RV102	1-238-978-11	RES, VAR, CARBON 100KX2 (BASS)	
RV103	1-241-508-11	RES, VAR, CARBON 100K/100K(DBFB LEVEL)	
RV104	1-238-459-11	RES, VAR, CARBON 100K (BALANCE)	
RV105	1-238-708-21	RES, VAR, CARBON 10K/100K/100K(VOLUME)	
RV301	1-241-317-11	RES, VAR, CARBON 50K (MIC LEVEL)	

< SWITCH >

S501	1-571-987-11	SWITCH, PUSH (2 KEY) (SPEAKERS)	
S701	1-572-733-11	SWITCH, ROTARY (WITH MOTOR) (FUNCTION VIDEO)	
S702	1-572-732-11	SWITCH, ROTARY (WITH MOTOR) (FUNCTION AUDIO)	
S703	1-554-303-21	SWITCH, TACTILE (SET) (E3, EA)	
S704	1-554-303-21	SWITCH, TACTILE (3) (E3, EA)	
S705	1-554-303-21	SWITCH, TACTILE (2) (E3, EA)	
S706	1-554-303-21	SWITCH, TACTILE (1) (E3, EA)	
S707	1-554-303-21	SWITCH, TACTILE (DBFB)	
S708	1-554-303-21	SWITCH, TACTILE (EQ REC)	
S709	1-554-303-21	SWITCH, TACTILE (CD DIRECT)	

****

MISCELLANEOUS
****

9	* 1-590-242-11	WIRE, FLAT TYPE (25 CORE)	
63	⚠ 1-575-654-11	CORD, POWER (EA)	
63	⚠ 1-575-656-11	CORD, POWER (E2, E3)	
63	⚠ 1-690-056-11	CORD, POWER (AUS)	
CN1	⚠ 1-526-794-11	OUTLET, AC (EA)	
CN1	⚠ 1-526-882-00	OUTLET, AC (E2, E3)	
CN1	⚠ 1-540-196-11	OUTLET, AC (AUS)	
F1	⚠ 1-532-388-51	FUSE (T2A)	
F2	⚠ 1-532-388-51	FUSE (T2A)	
F901	⚠ 1-532-388-51	FUSE (T2A)	
F902	⚠ 1-532-388-51	FUSE (T2A)	
J301	1-507-849-11	JACK, LARGE TYPE (MIC)	
J501	1-507-796-21	JACK (HEADPHONES)	
S2	⚠ 1-570-307-11	SWITCH, VOLTAGE CHANGE	
T1	⚠ 1-450-480-11	TRANSFORMER, POWER	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		ACCESSORY & PACKING MATERIAL	
		***************************	
	* 4-934-859-01	CUSHION	

****

HARDWARE LIST

# 1	7-621-773-93	SCREW (PANEL 2.6 TP2)
# 2	7-682-547-04	SCREW +BVTT 3X6 (S)
# 3	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S
# 4	7-682-547-09	SCREW +BVTT 3X6 (S)
# 5	7-621-849-00	SCREW, TAPPING
# 6	7-682-548-04	SCREW +BVTT 3X8 (S)
# 7	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3
# 8	7-682-560-04	SCREW +BVTT 4X6 (S)
# 9	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S

Sony Corporation

Audio Group

English
91F1814-1
printed in Japan

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Published by Customer Relations and Service Group.

TA-D705

SONY®

SERVICE MANUAL

E Model
Australian Model

SUPPLEMENT-1

File this supplement with the service manual.

Block Diagram

9-956-425-82

Sony Corporation
Audio Group

English
91I1814-1
Printed in Japan

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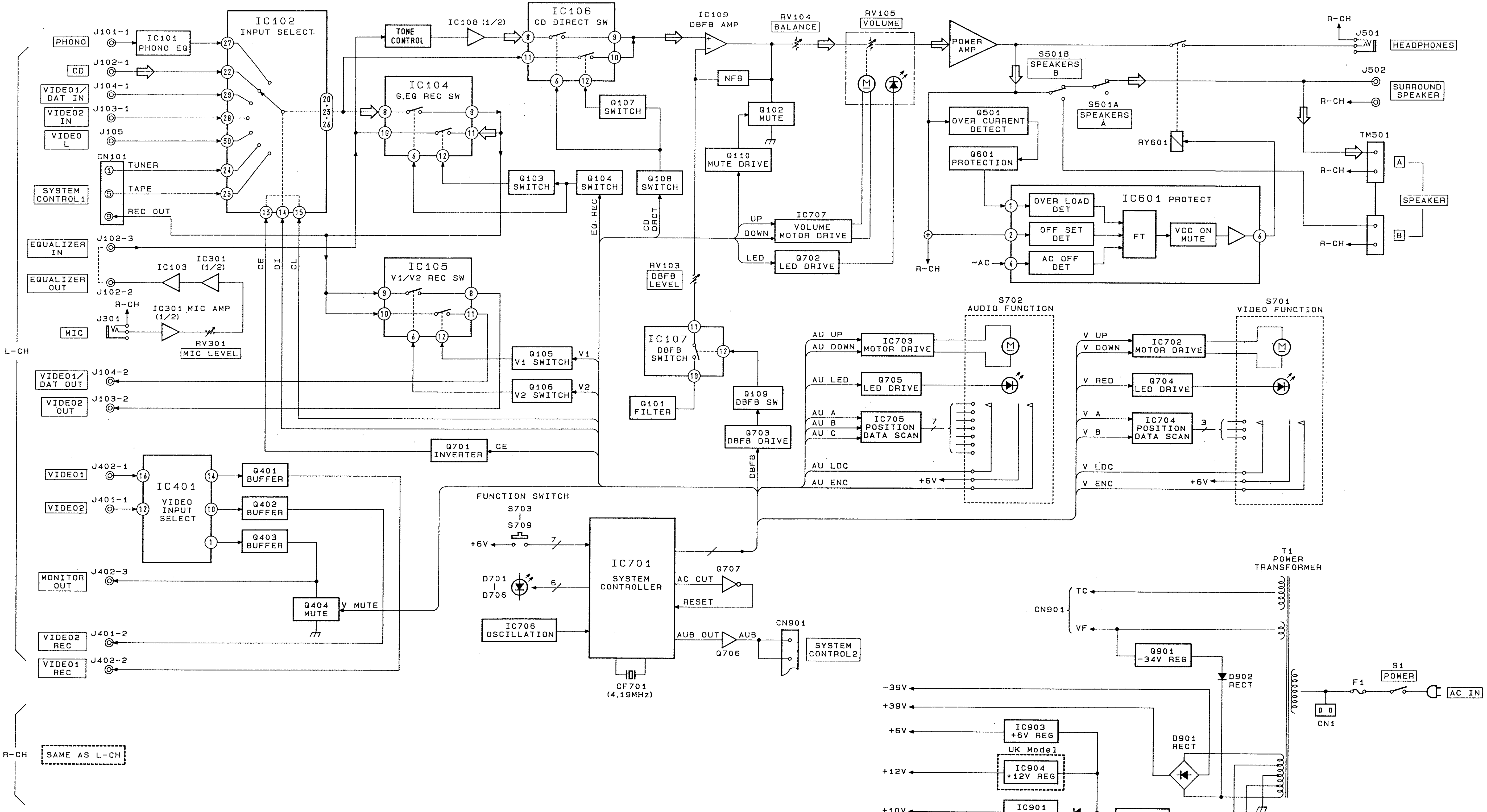
BLOCK DIAGRAM


L-CH
PHONO
J101-1
IC101
PHONO EQ
CD
J102-1
VIDEO1/
DAT IN
J104-1
VIDEO2
IN
J103-1
VIDEO
L
J105
CN101
TUNER
TAPE
SYSTEM
CONTROL1
REC OUT
IC102
INPUT SELECT
TONE
CONTROL
IC108 (1/2)
IC106
CD DIRECT SW
IC104
G.EQ REC SW
Q107
SWITCH
Q103
SWITCH
Q104
SWITCH
Q108
SWITCH
EQ REC
CD
DRCT
CE
DI
CL
EQUALIZER
IN
J102-3
EQUALIZER
OUT
J102-2
IC103
IC301
(1/2)
R-CH
IC301 MIC AMP
(1/2)
J301
MIC
RV301
MIC LEVEL
IC105
V1/V2 REC SW
Q105
V1 SWITCH
V1
Q106
V2 SWITCH
V2
VIDEO1/
DAT OUT
J104-2
VIDEO2
OUT
J103-2
Q701
INVERTER
CE
IC109
DBFB AMP
NFB
Q102
MUTE
Q110
MUTE DRIVE
RV104
BALANCE
RV105
VOLUME
IC707
VOLUME
MOTOR DRIVE
UP
DOWN
LED
Q702
LED DRIVE
RV103
DBFB
LEVEL
IC107
DBFB
SWITCH
Q101
FILTER
Q109
DBFB SW
Q703
DBFB DRIVE
DBFB
POWER
AMP
S501B
SPEAKERS
B
S501A
SPEAKERS
A
Q501
OVER CURRENT
DETECT
Q601
PROTECTION
IC601 PROTECT
OVER LOAD
DET
OFF SET
DET
AC OFF
DET
FT
VCC ON
MUTE
~AC
R-CH
R-CH
J501
HEADPHONES
J502
SURROUND
SPEAKER
R-CH
RY601
TM501
A
R-CH
B
R-CH
SPEAKER
S702
AUDIO FUNCTION
AU UP
AU DOWN
IC703
MOTOR DRIVE
AU LED
Q705
LED DRIVE
AU A
AU B
AU C
IC705
POSITION
DATA SCAN
7
AU LDC
AU ENC
+6V
S701
VIDEO FUNCTION
V UP
V DOWN
IC702
MOTOR DRIVE
V RED
Q704
LED DRIVE
V A
V B
IC704
POSITION
DATA SCAN
3
V LDC
V ENC
+6V
VIDEO1
J402-1
IC401
VIDEO
INPUT
SELECT
VIDEO2
J401-1
Q401
BUFFER
Q402
BUFFER
Q403
BUFFER
MONITOR
OUT
J402-3
Q404
MUTE
V MUTE
VIDEO2
REC
J401-2
VIDEO1
REC
J402-2
R-CH
SAME AS L-CH
FUNCTION SWITCH
S703
|
S709
+6V
7
D701
|
D706
6
IC706
OSCILLATION
IC701
SYSTEM
CONTROLLER
AC CUT
Q707
RESET
AUB OUT
AUB
Q706
CN901
SYSTEM
CONTROL2
CF701
(4.19MHz)
T1
POWER
TRANSFORMER
CN901
TC
VF
Q901
-34V REG
D902
RECT
S1
POWER
F1
AC IN
CN1
-39V
+39V
+6V
IC903
+6V REG
UK Model
IC904
+12V REG
+12V
D901
RECT
+10V
IC901
+10V REG
D905-908
RECT
-10V
IC901
+10V REG

ST-D505/D705

SERVICE MANUAL

AEP Model
UK Model

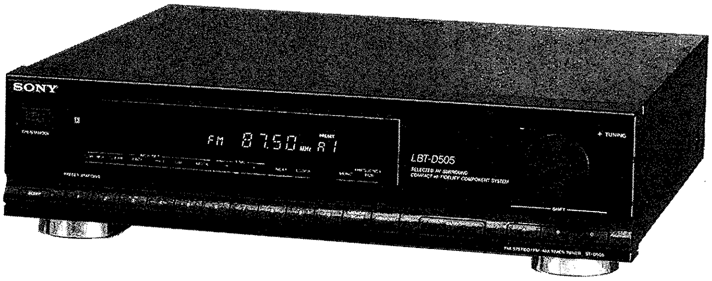


Photo: ST-D505

SPECIFICATIONS

Tuner	
System	FM stereo FM/AM superheterodyne tuner
FM tuner section	
Tuning range	87.5 to 108 MHz
Antenna	75 ohms unbalanced
Intermediate frequency	10.7 MHz
SW1, SW2, MW/LW tuner section	
Tuning range	MW: 522 to 1,611 kHz (Italian model) 531 to 1,602 kHz (AEP, UK, Germany models) LW: 144 to 288 kHz (Italian model) 153 to 279 kHz (AEP, UK, Germany models)
Antenna	AM loop antenna External antenna terminal
Intermediate frequency	450 kHz
Power requirements	240 V AC, 50 Hz (UK model) 220 V AC, 50 Hz (AEP, Germany, Italian models)
Power consumption	10 W
AC outlet	2 switched, total 450 W max.
Weight	Approx. 2.6 kg (5 lbs 12 oz)
Dimensions	Approx. 355 X 95 X 320 mm (w/h/d, including projections) (14 × 3 3/4 × 12 5/8 inches)

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

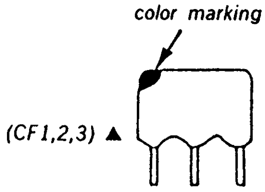
FM STEREO/FM-AM TUNER

SONY®

SECTION 1
SERVICING NOTES

Note on Ceramic Filter (CF1,2,3) ▲ Replacement.

This set employs three ceramic filters (CF1,2,3) ▲ which should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by * D609, * D610 is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.



○ : Mounted
× : not Mounted

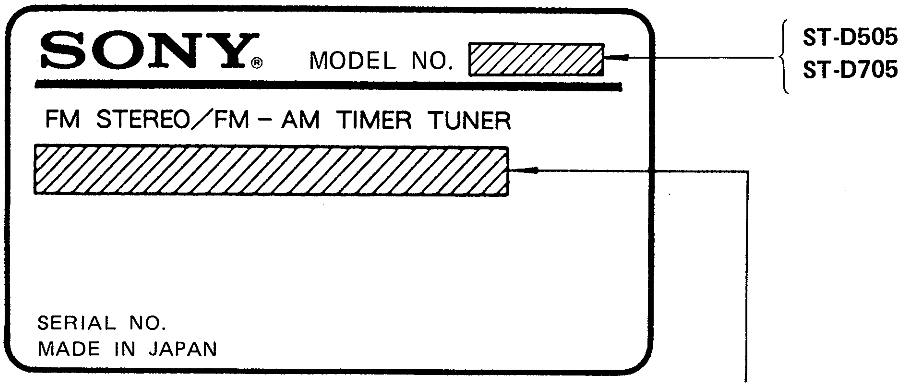
Ceramic filter		Mount		FM intermediate frequency (MHz)
Color mark	Center fre-quency (MHz)	* D609	* D610	
White	10.750	○	×	10.750
Red	10.700	×	×	10.700
Black	10.650	×	○	10.650

FM intermediate frequency is determined by the three types as shown above, Ceramic filters of same center frequency,i.e., of same color coding should be used for CF1, CF2, and CF3.

When replacing the ceramic filters, perform the FM Discriminator Adjustment.

▲ : AEP, UK Model : CF1, 2
Germany, IT Model: CF1, 2, 3

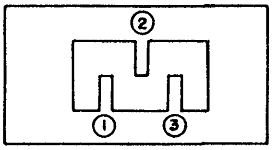
MODEL IDENTIFICATION
– Specification Label –



AEP, Germany, Italian Model: AC: 220V–230V ~50/60Hz
UK Model: AC: 240V ~ 50/60Hz

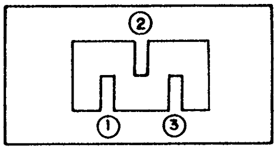
Signal of System Control Connector

CNJ901
SYSTEM CONTROL 1



1	L-CH OUT
2	GND
3	R-CH OUT

CNJ701
SYSTEM CONTROL 2

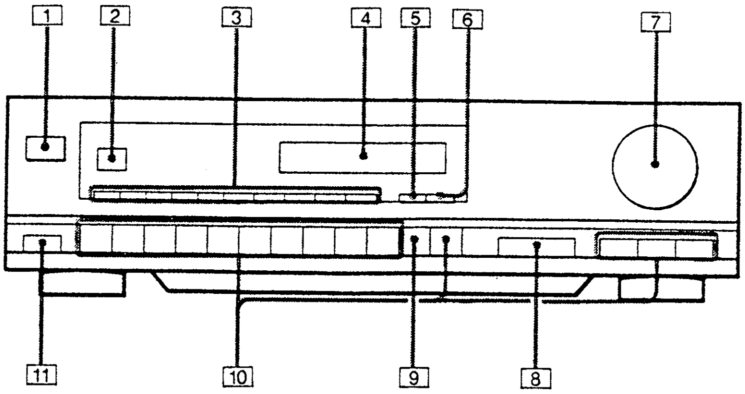


1	AUB
2	GND
3	

SECTION 2
GENERAL

This section is extracted from instruction manual.

LOCATION OF CONTROLS


1
2
3
4
5
6
7
11
10
9
8

Refer to the pages indicated in ● for details.

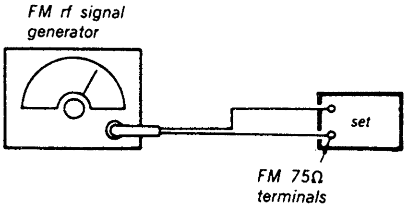
1 SYSTEM POWER switch ⑩
2 Remote sensor
3 Buttons for setting the clock and timer (54)
4 Display window
5 STEREO/MUTE button ⑭
6 FREQUENCY/TIME button ㊿
7 TUNING control ⑮
8 BAND selector ⑭
9 MEMORY SCAN button ⑯
10 Buttons for storing station frequencies ⑰
11 SLEEP button (53)

SECTION 3
ELECTRICAL ADJUSTMENTS

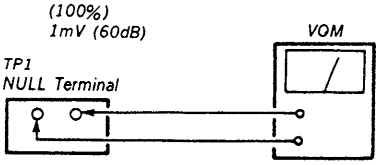
FM SECTION

FM DISCRIMINATOR ADJUSTMENT

Setting:


FM rf signal generator
set
FM 75Ω terminals

Carrier frequency : 98MHz
Modulation : 1kHz, 40kHz deviation (100%)
Output level : 1mV (60dB)


TP1
NULL Terminal
VOM

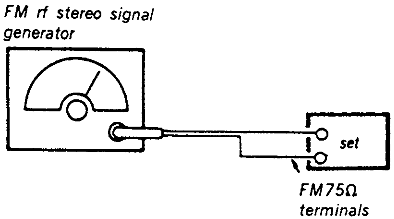
Procedure:

1. Tune the set to 98MHz.
2. Adjust T21 for 0V reading on the VOM.

Note: FM tuning level adjustment should be made after FM discriminator alignment.

FM TUNING LEVEL ADJUSTMENT

Setting:


FM rf stereo signal generator
set
FM75Ω terminals

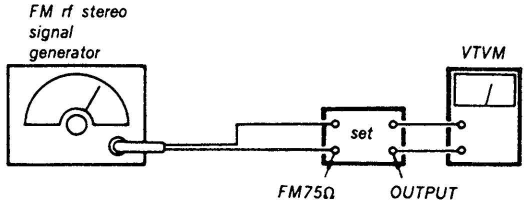
Carrier frequency : 98MHz
Modulation : 1kHz, 40kHz deviation (100%)
Output level : 17.8µV (25dB)

Procedure:

1. Tune the set to 98MHz.
2. Adjust RV24 so that the TUNED LED goes on.

FM STEREO SEPARATION ADJUSTMENT

Procedure:


FM rf stereo signal generator
VTVM
set
FM75Ω terminals
OUTPUT

CNJ901 ①: L-CH
③: R-CH

Carrier frequency : 98MHz
Output level : 1mV (60dB)
Modulation
Audio 400Hz : 16.25kHz deviation
Sub channel 38kHz : 16.25kHz deviation
Pilot signal 19kHz : 7.5kHz deviation

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV21 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV21 for minimum reading.

L-CH Stereo separation: Ⓐ−Ⓑ
R-CH Stereo separation: Ⓒ−Ⓓ

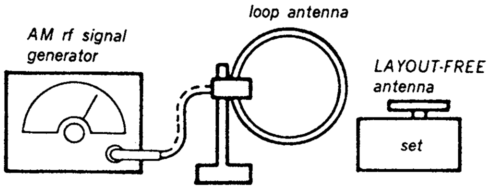
The separations of both channels should be equal.

MW/LW SECTION

AM TUNING LEVEL ADJUSTMENT

BAND select switch : LW

Setting :


loop antenna
AM rf signal generator
LAYOUT-FREE antenna
set

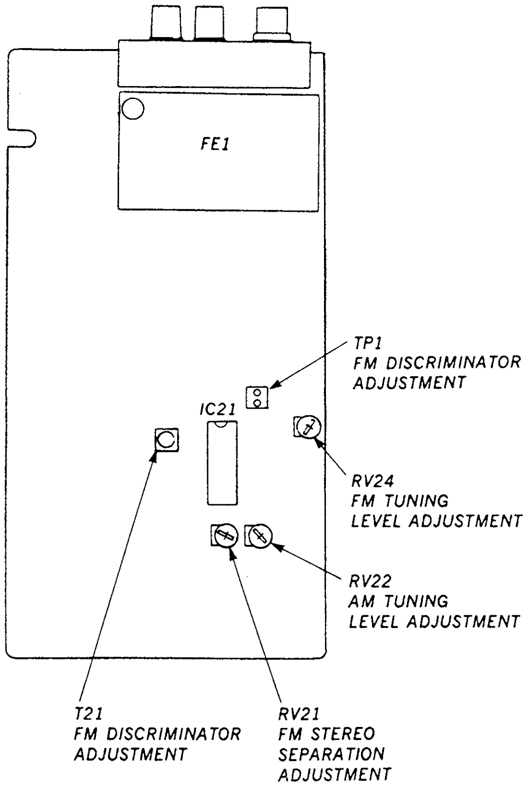
Carrier frequency : 216kHz
Modulation : 400Hz, 30% modulation

Procedure :

1. Set loop antenna so that the LAYOUT-FREE antenna input level becomes 2.5mV/m (68dB).
2. Tune the set to 216kHz.
3. Adjust the RV22 so that the TUNED LED goes on.

Adjustment Location :

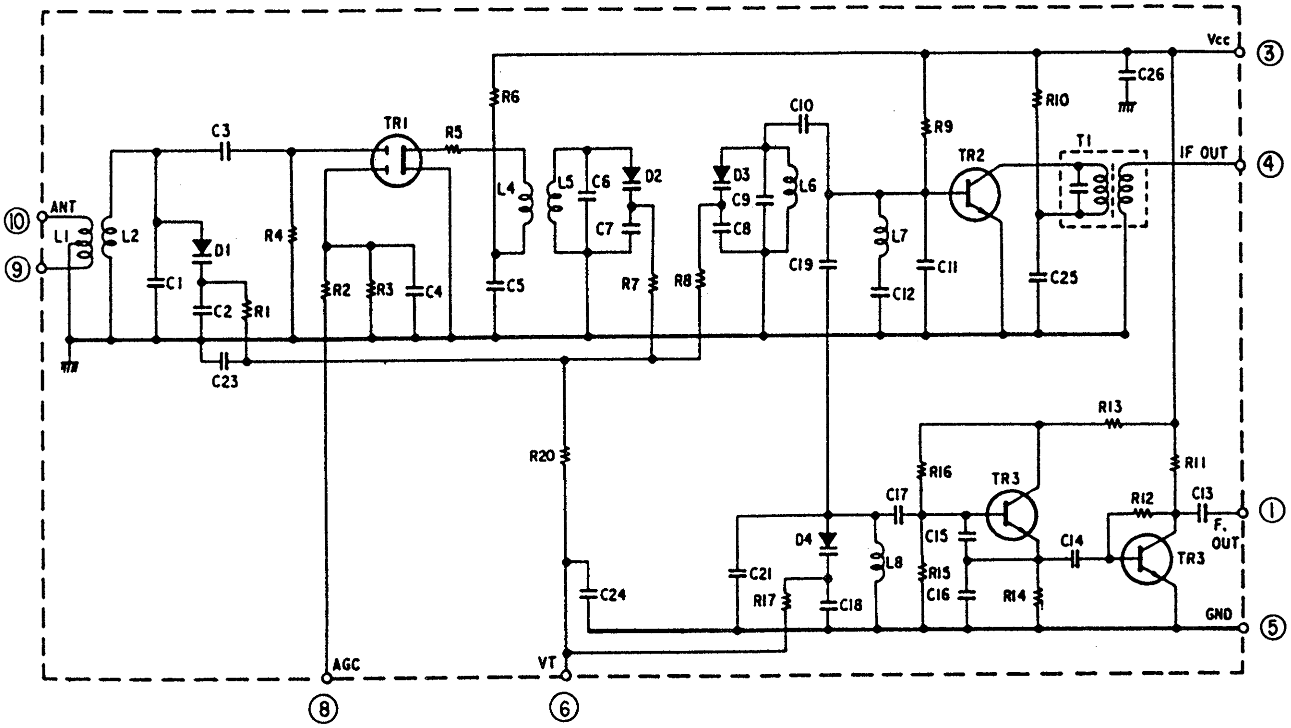
—tuner board—


FE1
TP1
FM DISCRIMINATOR ADJUSTMENT
IC21
RV24
FM TUNING LEVEL ADJUSTMENT
RV22
AM TUNING LEVEL ADJUSTMENT
T21
FM DISCRIMINATOR ADJUSTMENT
RV21
FM STEREO SEPARATION ADJUSTMENT

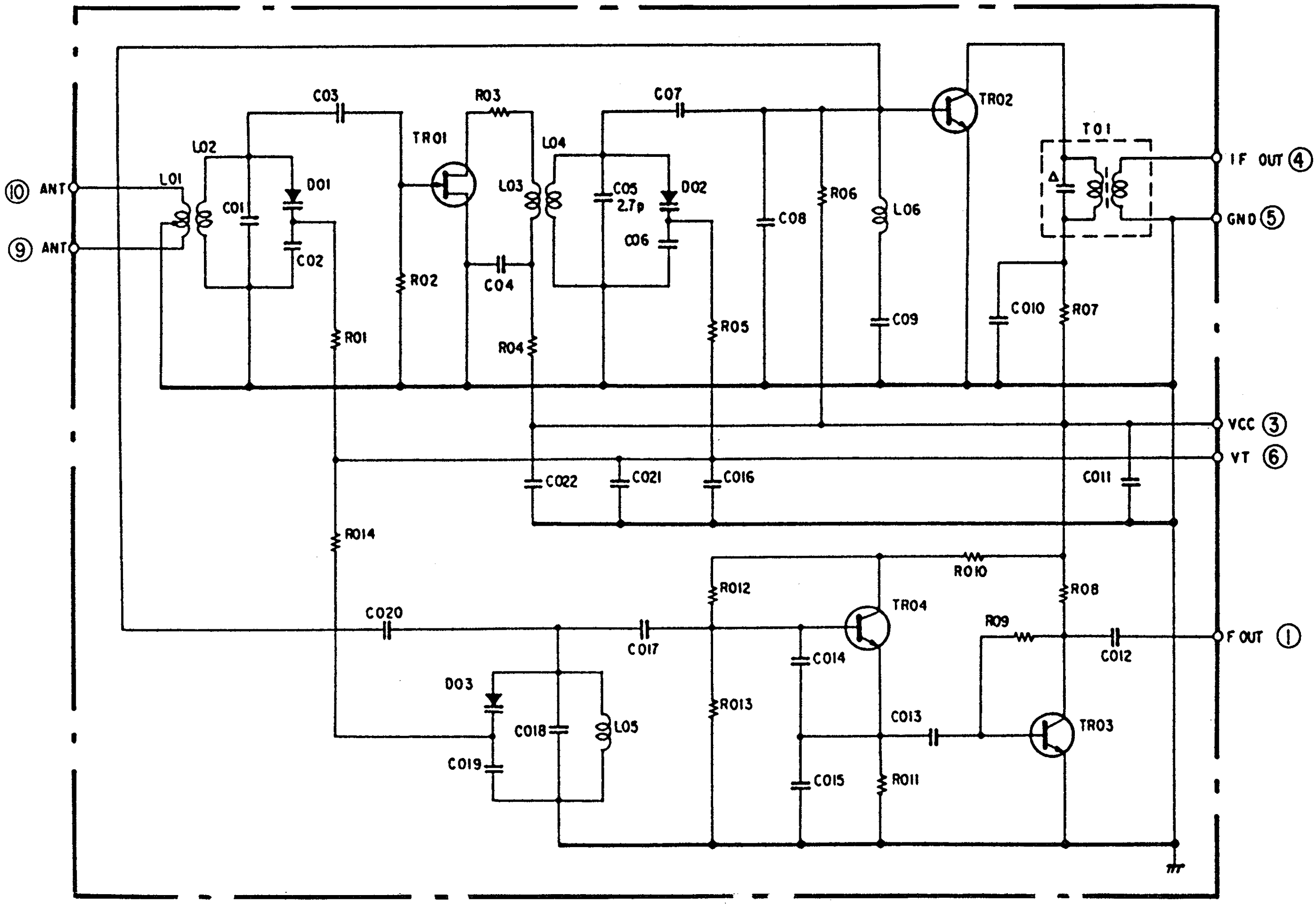
SECTION 4
DIAGRAMS

4-1. FM FRONT-END (FE1) SCHEMATIC DIAGRAMS

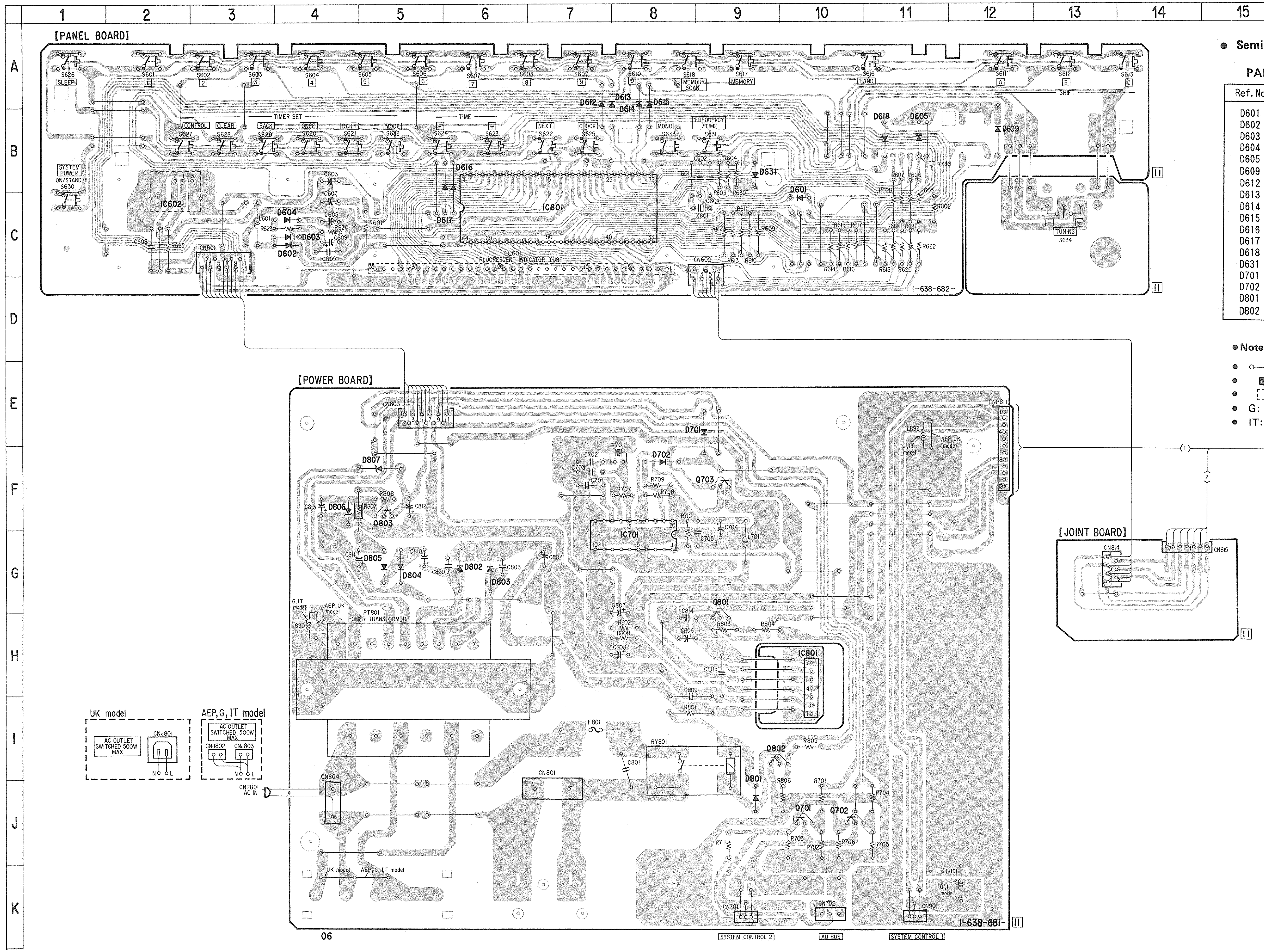
(Germany, Italian Model)


Vcc ③
IF OUT ④
F. OUT ①
GND ⑤
ANT
⑩
⑨
AGC ⑧
VT ⑥
L1
L2
C1
C2
C3
D1
R1
C23
TR1
R5
R2
R3
C4
R4
R6
L4
C5
L5
C6
C7
D2
R7
R8
D3
C9
C8
C10
L6
C19
L7
C12
C11
R9
TR2
R10
T1
C25
C26
R13
R11
R16
TR3
C17
C15
R15
C16
R14
C14
R12
C13
D4
L8
C18
R17
C21
C24
R20

(AEP, UK Model)


⑩ ANT
⑨ ANT
L01
L02
C01
D01
C02
C03
R01
R02
R03
TR01
L03
L04
C04
R04
C05
2.7p
D02
C06
C07
R05
C08
R06
L06
C09
TR02
T01
Δ
IF OUT ④
GND ⑤
C010
R07
VCC ③
VT ⑥
C022
C021
C016
C011
R014
C020
C017
R012
R010
R08
TR04
R09
C012
F OUT ①
C014
R013
C013
TR03
C015
R011
D03
C018
L05
C019

4-2. PRINTED WIRING BOARDS


[PANEL BOARD]
[POWER BOARD]
[JOINT BOARD]
IC601
IC602
FL601 FLUORESCENT INDICATOR TUBE
SYSTEM POWER ON/STANDBY S630
TUNING S634
1-638-682-
IC701
IC801
PT801 POWER TRANSFORMER
RY801
F801
CN801
CNP801 AC IN
UK model
AC OUTLET SWITCHED 500W MAX
AEP,G,IT model
AC OUTLET SWITCHED 500W MAX
1-638-681-
SYSTEM CONTROL 2
AU BUS
SYSTEM CONTROL 1
06

- **Semiconductor Location**

PANEL and POWER BOARD

Ref. No.	Location	Ref. No.	Location
D601	C-10	D803	G-6
D602	C-4	D804	G-5
D603	C-4	D805	G-5
D604	C-4	D806	F-4
D605	B-11	D807	F-5
D609	B-12		
D612	A-7	IC601	C-7
D613	A-7	IC602	C-2
D614	B-8	IC701	G-8
D615	A-8	IC801	H-10
D616	B-6		
D617	C-5	Q701	J-10
D618	B-11	Q702	J-10
D631	B-9	Q703	F-9
D701	E-9	Q801	G-9
D702	F-8	Q802	I-9
D801	J-9	Q803	F-5
D802	G-6		

TUNER BOARD

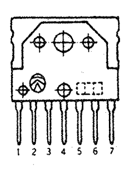
Ref. No.	Location	Ref. No.	Location
D61	J-20	Q26	K-24
		Q61	J-20
IC21	J-21	Q62	J-20
IC81	G-20	Q63	J-20
		Q64	I-19
Q1	H-20	Q65	J-21
Q2	H-20	Q66	J-20
Q3	H-20	Q81	H-21
Q4	H-21	Q82	H-21
Q21	H-24	Q83	G-18
Q22	I-24	Q84	F-17
Q23	H-21	Q85	G-17
Q24	H-21	Q86	G-17

● Note on Printed Wiring Board:

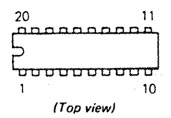
- o—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- [ ]← indicates side identified with part number.
- G: Germany model
- IT: Italian model

4-3. SEMICONDUCTOR LEAD LAYOUTS

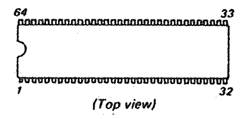
LA5667



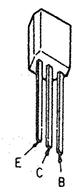
M50760-141P


20
11
1
10
(Top view)

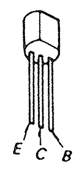
TMP47C870N-4317


64
33
1
32
(Top view)

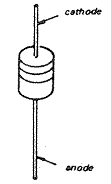
DTC114ES
2SC2603-EF



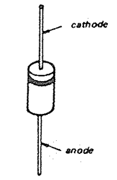
2SB1116A-L

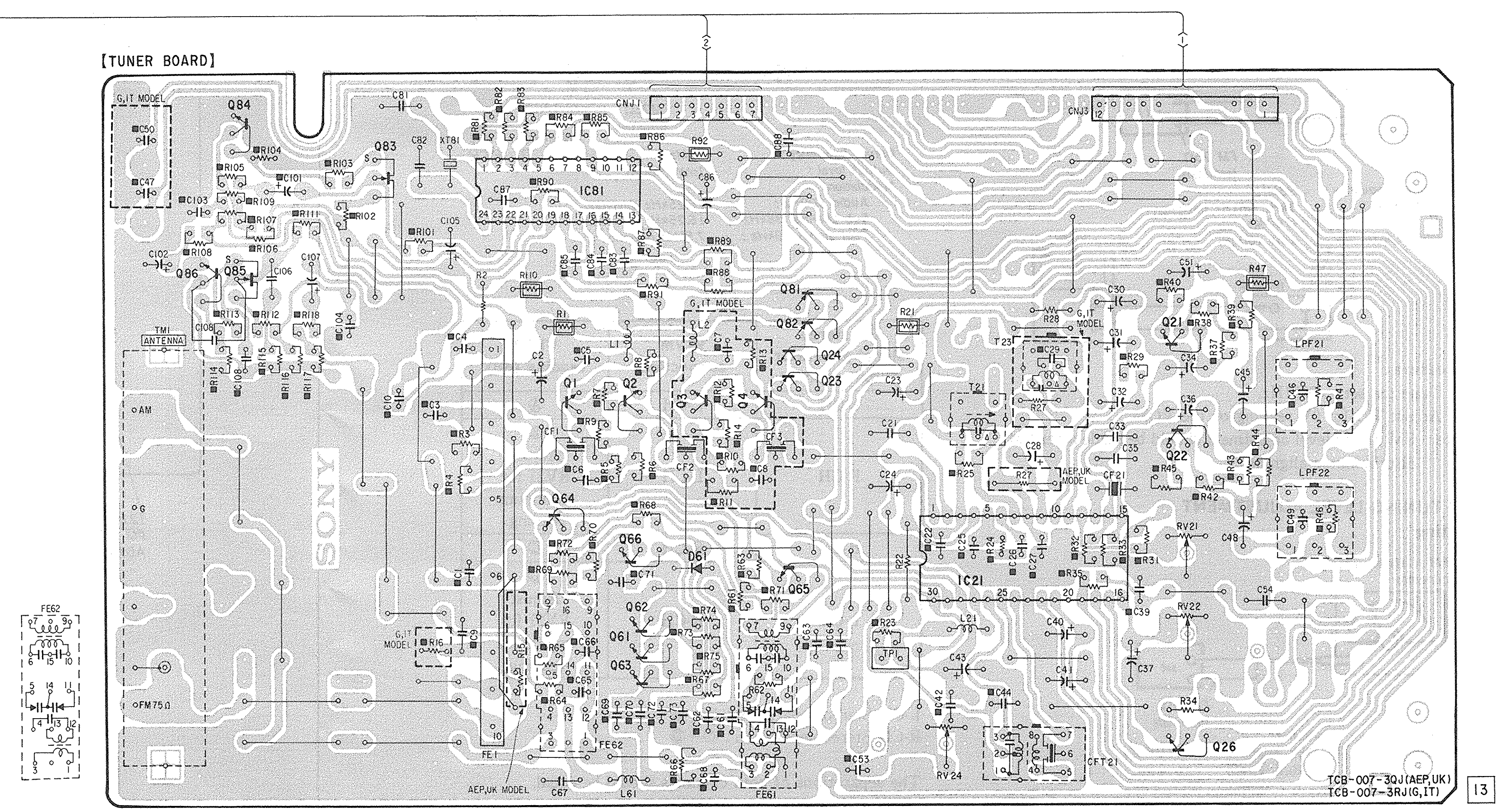


HZS30-2L
1SS120


cathode
anode

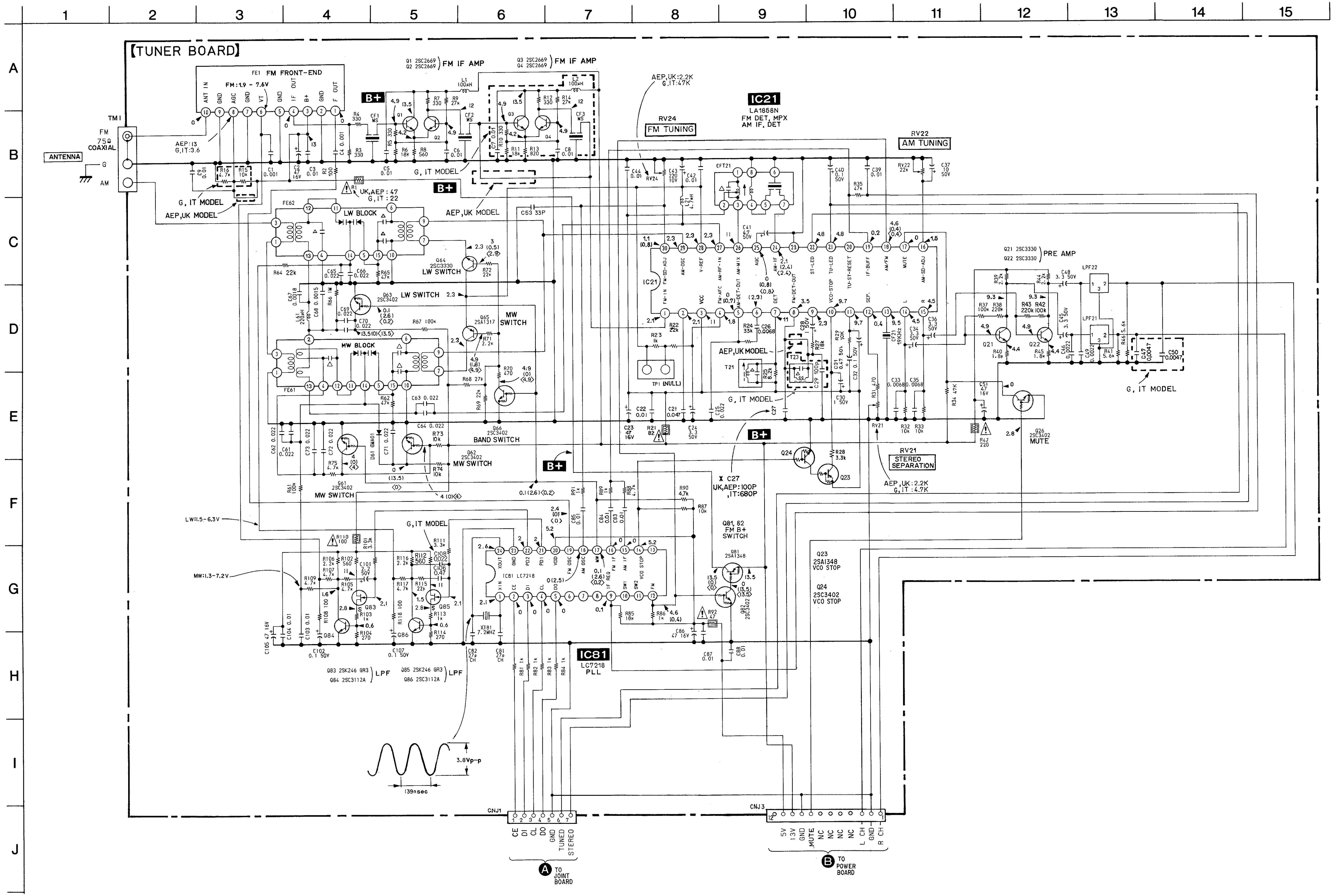
UZP-5.6B
10E2N


cathode
anode


[TUNER BOARD]
IC21
IC81
SONY
FM 75Ω
AM
TM1 ANTENNA
AEP,UK MODEL
G,IT MODEL
TCB-007-3QJ(AEP,UK)
TCB-007-3RJ(G,IT)

4-4. SCHEMATIC DIAGRAM —TUNER SECTION—

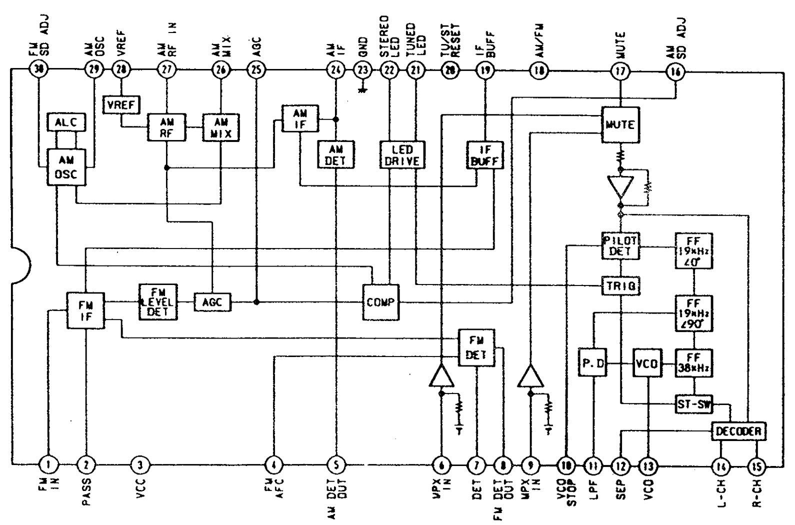
- See page 11 for note.



[TUNER BOARD]
ANTENNA
TM1
FM 75Ω COAXIAL
AM
FE1 FM FRONT-END
FM:1.9 - 7.6V
Q1 2SC2669 Q2 2SC2669 FM IF AMP
Q3 2SC2669 Q4 2SC2669 FM IF AMP
B+
IC21
LA1851N
FM DET, MPX
AM IF, DET
RV24 FM TUNING
RV22 AM TUNING
AEP,UK:2.2K G,IT:47K
G, IT MODEL
AEP,UK MODEL
LW BLOCK
MW BLOCK
FE62
FE61
Q64 2SC3330 LW SWITCH
Q63 2SC3402 LW SWITCH
Q65 2SA1317 MW SWITCH
Q66 2SC3402 BAND SWITCH
Q62 2SC3402 MW SWITCH
Q61 2SC3402 MW SWITCH
Q21 2SC3330 Q22 2SC3330 PRE AMP
LPF22
LPF21
Q26 2SC3402 MUTE
RV21 STEREO SEPARATION
AEP,UK:2.2K G,IT:4.7K
C27 UK,AEP:100P ,IT:680P
TP1 (NULL)
AEP,UK MODEL
T21
Q81,82 FM B+ SWITCH
Q81 2SA1348
Q82 2SC3402
Q23 2SA1348 VCO STOP
Q24 2SC3402 VCO STOP
LW:1.5-6.3V
MW:1.3-7.2V
G,IT MODEL
IC81 LC7218 PLL
Q83 2SK246 GR3 Q84 2SC3112A LPF
Q85 2SK246 GR3 Q86 2SC3112A LPF
X181 7.2MHz
3.8Vp-p
139nsec
CNJ1
CE DI CL DO GND TUNED STEREO
A TO JOINT BOARD
CNJ3
5V 13V GND MUTE NC NC NC L CH GND R CH
B TO POWER BOARD

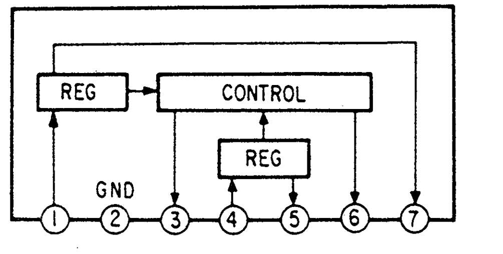
4-5. IC BLOCK DIAGRAMS

IC21 LA1851N



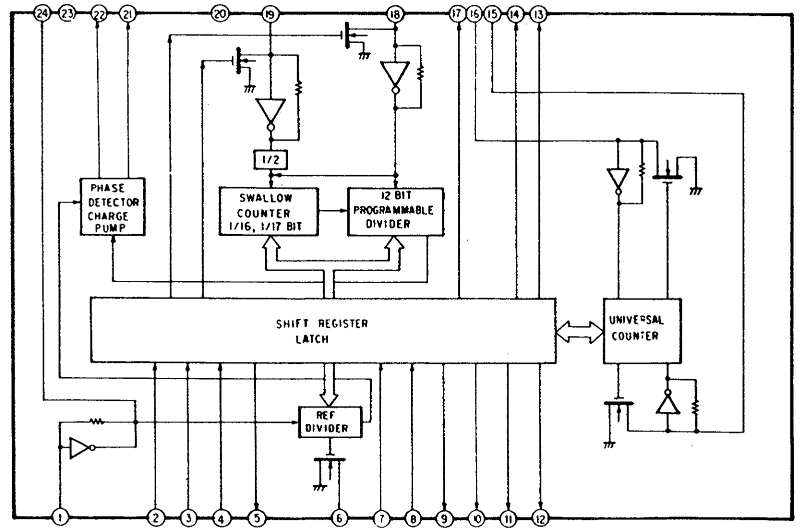
ALC
AM OSC
VREF
AM RF
AM MIX
AM IF
AM DET
LED DRIVE
IF BUFF
MUTE
PILOT DET
TRIG
FF 19kHz
FF 19kHz
FF 38kHz
P.D
VCO
ST-SW
DECODER
FM IF
FM LEVEL DET
AGC
COMP
FM DET

IC801 LA5667



REG
CONTROL
REG
GND

IC81 LC7218



PHASE DETECTOR CHARGE PUMP
1/2
SWALLOW COUNTER 1/16, 1/17 BIT
12 BIT PROGRAMMABLE DIVIDER
SHIFT REGISTER LATCH
UNIVERSAL COUNTER
REF DIVIDER

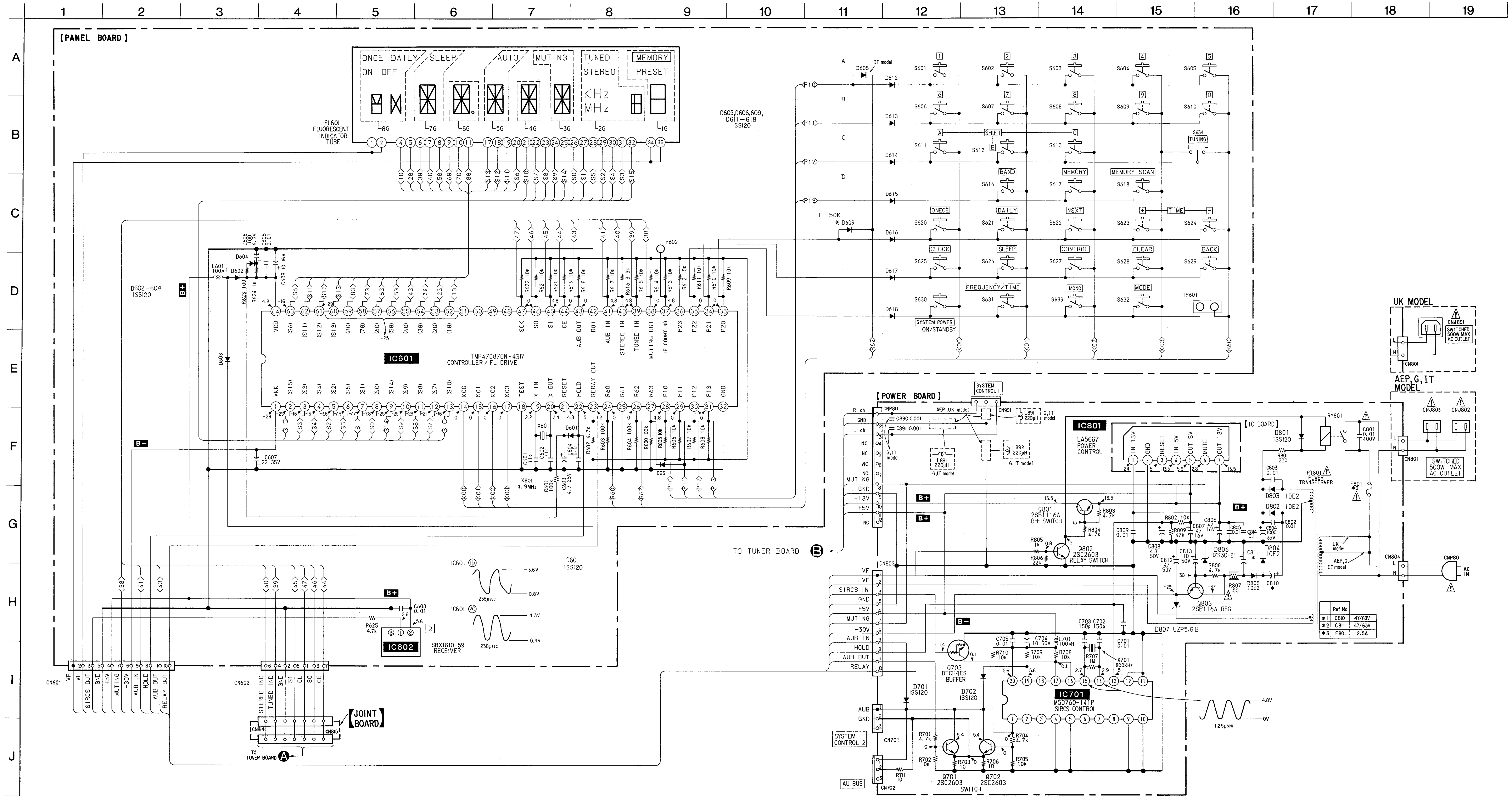
- **Note on Schematic Diagram:**
- ＊D609, ＊D610: See page 2 for Note on Ceramic Filter (CF1, 2, 3) ▲ Replacement.
- All capacitors are in μF unless otherwise noted. uF: μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : nonflammable resistor.
- B+ : B+ line.
- B– : B– line.
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.

  no mark : FM
  ( ) : AM
  < > : LW

- Voltages are taken with a VOM. (Input impedance 10MΩ) Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
- G: Germany model
- IT: Italian model

4-6. SCHEMATIC DIAGRAM
—PANEL AND POWER SUPPLY SECTION—

- See page 11 for note.


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
A B C D E F G H I J
[PANEL BOARD]
ONCE DAILY SLEEP AUTO MUTING TUNED MEMORY
ON OFF STEREO PRESET
KHz MHz
FL601 FLUORESCENT INDICATOR TUBE
D605,D606,609, D611-618 1SS120
D602-604 1SS120
IC601
TMP47C870N-4317 CONTROLLER/FL DRIVE
X601 4.19MHz
D601 1SS120
IC602
SBX1610-59 RECEIVER
IC601 ⑲ 3.6V 0.8V 238μsec
IC601 ⑳ 4.3V 0.4V 238μsec
CN601 VF VF SIRCS OUT GND +5V MUTING -30V AUB IN HOLD AUB OUT RELAY OUT
CN602 STEREO IND TUNED IND ST CL SO CE
[JOINT BOARD]
CN814 CN815
TO TUNER BOARD Ⓐ
TO TUNER BOARD Ⓑ
S601 S602 S603 S604 S605 S606 S607 S608 S609 S610
S611 S612 SHIFT S613 S634 TUNING
BAND MEMORY MEMORY SCAN S616 S617 S618
ONCE DAILY NEXT TIME S620 S621 S622 S623 S624
CLOCK SLEEP CONTROL CLEAR BACK S625 S626 S627 S628 S629
FREQUENCY/TIME MONO MODE S630 S631 S633 S632
SYSTEM POWER ON/STANDBY
TP601 TP602
IF+50K D609
[POWER BOARD]
SYSTEM CONTROL 1
CN811 R-ch GND L-ch NC MUTING GND +13V +5V NC
AEP,UK model G,IT model
IC801 LA5667 POWER CONTROL
[IC BOARD]
IN 13V GND RESET IN 5V OUT 5V MUTE OUT 13V
Q801 2SB1116A B+ SWITCH
Q802 2SC2603 RELAY SWITCH
Q803 2SB1116A REG
D806 HZS30-2L
D801 1SS120
D803 10E2 D802 10E2 D804 10E2 D805 10E2
RY801
PT801 POWER TRANSFORMER
F801
D807 UZP5.6B
UK MODEL
CNJ801 SWITCHED 500W MAX AC OUTLET
CN801
AEP,G,IT MODEL
CNJ803 CNJ802 SWITCHED 500W MAX AC OUTLET
CN804 CNP801 AC IN
Ref No ✱1 C810 47/63V ✱2 C811 47/63V ✱3 F801 2.5A
CN803 VF VF SIRCS IN GND +5V MUTING -30V AUB IN HOLD AUB OUT RELAY
Q703 DTC114ES BUFFER
D701 1SS120 D702 1SS120
IC701 M50760-141P SIRCS CONTROL
X701 800KHz
4.8V 0V 1.25μsec
AUB GND
SYSTEM CONTROL 2 CN701
AU BUS CN702
Q701 2SC2603 Q702 2SC2603 SWITCH

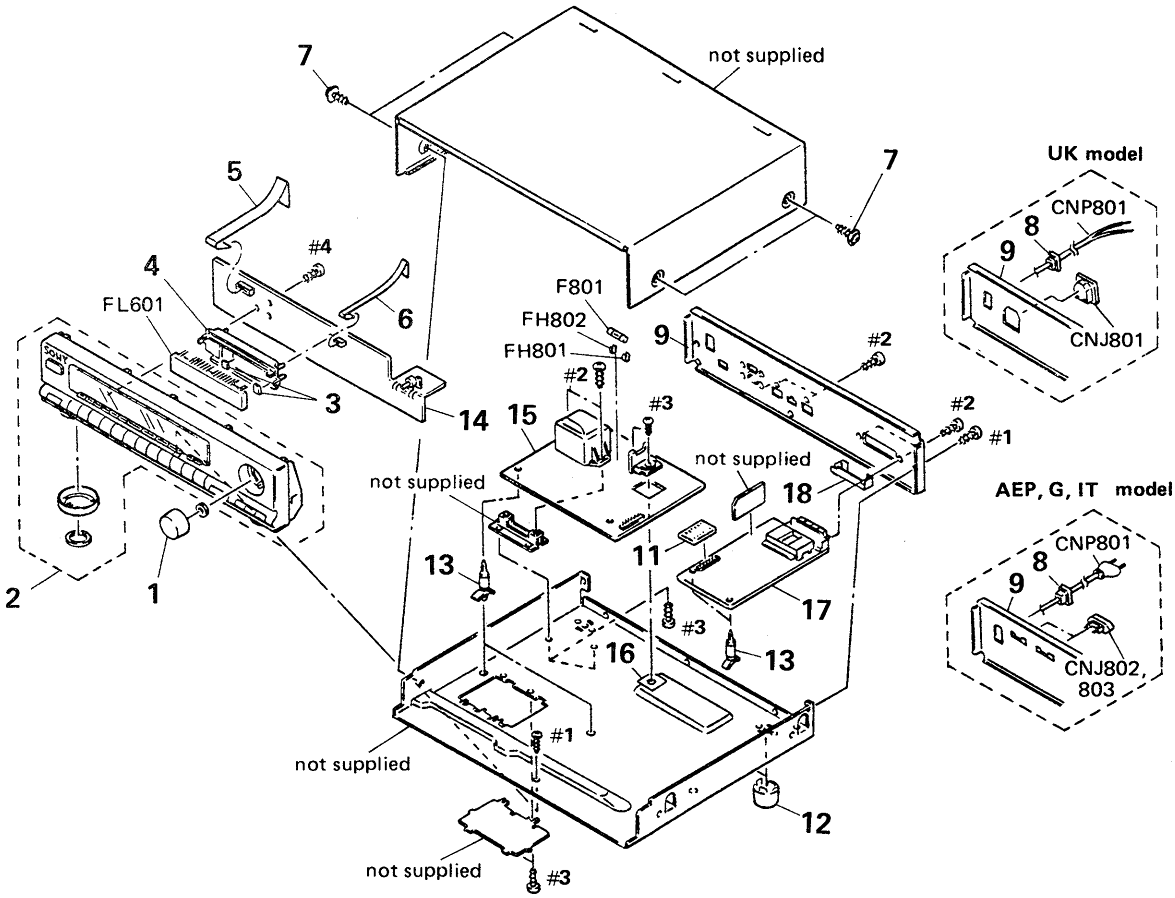
SECTION 5 EXPLODED VIEW

NOTE:

- –XX, –X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ Parts color ↑ Cabinet's color
- Items marked "＊" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- G: Germany model
- IT: Italian model



Ref. No.	Part No.	Description	Remark
1	4-930-861-01	KNOB	
2	X-4941-446-1	PANEL ASSY, FRONT (D505: AEP, UK, G)	
2	X-4941-445-1	PANEL ASSY, FRONT (D505: IT)	
2	X-4941-447-1	PANEL ASSY, FRONT (D705: AEP, UK, G)	
2	X-4941-448-1	PANEL ASSY, FRONT (D705: IT)	
3	＊ 4-921-941-31	CUSHION (FL)	
4	＊ 4-923-103-01	HOLDER, FL TUBE	
5	1-575-666-11	WIRE, FLAT TYPE (11 CORE)	
6	＊ 1-575-851-11	WIRE, FLAT TYPE (7 CORE)	
7	3-363-099-01	SCREW (CASE +3X8 TP2)	
8	＊ 3-703-244-00	BUSHING (2104), CORD	
9	＊ 4-943-332-11	PANEL, BACK (D505: AEP)	
9	＊ 4-943-332-21	PANEL, BACK (D505: UK)	
9	＊ 4-943-332-31	PANEL, BACK (D505: G)	
9	＊ 4-943-332-41	PANEL, BACK (D505: IT)	
9	＊ 4-943-816-11	PANEL, BACK (D705: AEP)	
9	＊ 4-943-816-21	PANEL, BACK (D705: UK)	
9	＊ 4-943-816-31	PANEL, BACK (D705: G)	
9	＊ 4-943-816-41	PANEL, BACK (D705: IT)	
11	＊ 1-573-066-11	CONNECTOR, BOARD TO BOARD 12P	
12	4-931-169-01	FOOT	
13	＊ 4-924-098-31	HOLDER, PC BOARD	

Ref. No.	Part No.	Description	Remark
14	＊ A-4341-669-A	PANEL BOARD, COMPLETE (AEP)	
14	＊ A-4341-673-A	PANEL BOARD, COMPLETE (UK)	
14	＊ A-4341-676-A	PANEL BOARD, COMPLETE (G)	
14	＊ A-4341-677-A	PANEL BOARD, COMPLETE (IT)	
15	＊ A-4341-668-A	POWER BOARD, COMPLETE (AEP)	
15	＊ A-4341-670-A	POWER BOARD, COMPLETE (UK)	
15	＊ A-4341-675-A	POWER BOARD, COMPLETE (G, IT)	
16	＊ 4-937-354-01	SHEET	
17	1-589-204-11	PC BOARD, MOUNTED (AEP, UK)	
17	1-589-210-11	PC BOARD, MOUNTED (G, IT)	
18	＊ 4-924-988-11	PLATE (ST), GROUND	
⚠CNJ801	· 1-526-751-11	OUTLET, AC (UK)	
⚠CNJ802	· 1-526-794-11	OUTLET, AC (AEP, G, IT)	
⚠CNJ803	· 1-526-794-11	OUTLET, AC (AEP, G, IT)	
⚠CNP801	· 1-575-652-11	CORD, POWER (UK)	
⚠CNP801	· 1-575-651-11	CORD, POWER (AEP, G, IT)	
F801	⚠· 1-532-286-00	FUSE, TIME-LAG (2.5A)	
FH801	＊ 1-533-213-31	HOLDER, FUSE	
FH802	＊ 1-533-213-31	HOLDER, FUSE	
FL601	1-519-595-21	INDICATOR TUBE, FLUORESCENT	

PANEL **POWER**

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- –XX, –X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF: μF
- COILS
  uH: μH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- G: Germany model
- IT: Italian model

Ref. No.	Part No.	Description			Remark
	* A-4341-669-A	PANEL BOARD, COMPLETE (AEP)			
	* A-4341-673-A	PANEL BOARD, COMPLETE (UK)			
	* A-4341-676-A	PANEL BOARD, COMPLETE (G)			
	* A-4341-677-A	PANEL BOARD, COMPLETE (IT)			
	* A-4341-668-A	POWER BOARD, COMPLETE (AEP)			
	* A-4341-670-A	POWER BOARD, COMPLETE (UK)			
	* A-4341-675-A	POWER BOARD, COMPLETE (G, IT)			
		*******************************			
	* 1-573-068-11	CONNECTOR, BOARD TO BOARD 12P			
	* 4-921-941-31	CUSHION (FL)			
	* 4-923-103-01	HOLDER, FL TUBE			
		< CAPACITOR >			
C601	1-162-200-31	CERAMIC	11PF	5%	50V
C602	1-162-200-31	CERAMIC	11PF	5%	50V
C603	1-126-163-11	ELECT	4.7uF	20%	50V
C604	1-161-379-00	CERAMIC	0.01uF	20%	25V
C605	1-161-379-00	CERAMIC	0.01uF	20%	25V
C606	1-126-177-11	ELECT	100uF	20%	10V
C607	1-123-357-00	ELECT	22uF	20%	35V
C608	1-161-379-00	CERAMIC	0.01uF	20%	25V
C609	1-126-157-11	ELECT	10uF	20%	16V
C701	1-164-096-11	CERAMIC	0.01uF		50V
C702	1-162-284-31	CERAMIC	150PF	10%	50V
C703	1-162-284-31	CERAMIC	150PF	10%	50V
C704	1-126-059-11	ELECT	10uF	20%	50V
C705	1-164-096-11	CERAMIC	0.01uF		50V
C801	1-161-744-00	CERAMIC	0.01uF		400V
C802	1-101-004-00	CERAMIC	0.01uF		50V
C803	1-101-004-00	CERAMIC	0.01uF		50V
C804	1-126-105-11	ELECT	1000uF	20%	35V
C805	1-161-379-00	CERAMIC	0.01uF	20%	25V

Ref. No.	Part No.	Description			Remark
C806	1-126-022-11	ELECT	47uF	20%	16V
C807	1-126-022-11	ELECT	47uF	20%	16V
C808	1-126-163-11	ELECT	4.7uF	20%	50V
C809	1-164-096-11	CERAMIC	0.01uF		50V
C810	1-124-918-11	ELECT	47uF	20%	63V
C811	1-124-918-11	ELECT	47uF	20%	63V
C812	1-124-910-11	ELECT	47uF	20%	50V
C813	1-126-059-11	ELECT	10uF	20%	50V
C814	1-136-165-00	FILM	0.1uF	5%	50V
C890	1-162-294-31	CERAMIC	0.001uF	(G, IT)	
C891	1-162-294-31	CERAMIC	0.001uF	(G, IT)	
		< CONNECTOR >			
CN601	* 1-568-830-11	SOCKET, CONNECTOR 11P			
CN602	* 1-568-826-11	SOCKET, CONNECTOR 7P			
CN701	* 1-569-625-11	SOCKET, CONNECTOR 3P (SYSTEM CONTROL 2)			
CN702	* 1-565-561-11	PIN, CONNECTOR 3P (AU BUS) (EXCEPT UK)			
CN702	* 1-568-545-11	SOCKET, CONNECTOR (PC BOARD) 3P (AU BUS) (UK)			
CN801	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P			
CN803	* 1-568-830-11	SOCKET, CONNECTOR 11P			
CN804	* 1-564-321-00	PIN, CONNECTOR 2P			
CN814	* 1-568-826-11	SOCKET, CONNECTOR 7P			
CN815	* 1-565-346-11	SOCKET, CONNECTOR (PC BAORD) 7P			
CN901	* 1-569-625-41	SOCKET, CONNECTOR 3P (SYSTEM CONTROL 1)			

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D601	8-719-912-20	DIODE 1SS120	
D602	8-719-912-20	DIODE 1SS120	
D603	8-719-912-20	DIODE 1SS120	
D604	8-719-912-20	DIODE 1SS120	
D605	8-719-912-20	DIODE 1SS120 (IT)	
D609	8-719-912-20	DIODE 1SS120	
D612	8-719-912-20	DIODE 1SS120	
D613	8-719-912-20	DIODE 1SS120	
D614	8-719-912-20	DIODE 1SS120	
D615	8-719-912-20	DIODE 1SS120	
D616	8-719-912-20	DIODE 1SS120	
D617	8-719-912-20	DIODE 1SS120	
D618	8-719-912-20	DIODE 1SS120	
D631	8-719-912-20	DIODE 1SS120	
D701	8-719-912-20	DIODE 1SS120	
D702	8-719-912-20	DIODE 1SS120	
D801	8-719-912-20	DIODE 1SS120	
D802	8-719-200-77	DIODE 10E2N	
D803	8-719-200-77	DIODE 10E2N	
D804	8-719-200-77	DIODE 10E2N	
D805	8-719-200-77	DIODE 10E2N	
D806	8-719-934-22	DIODE HZS30-2L	
D807	8-719-014-66	DIODE UZP-5.6B	
		< HOLDER >	
FH801	* 1-533-213-31	HOLDER, FUSE	
FH802	* 1-533-213-31	HOLDER, FUSE	
		< INDICATOR TUBE >	
FL601	1-519-595-21	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC601	8-759-246-20	IC TMP47C870N-4317	
IC602	8-741-100-48	IC SBX1610-59	
IC701	8-759-634-73	IC M50760-141P	
IC801	8-759-820-09	IC LA5667	
		< COIL >	
L601	1-410-521-11	INDUCTOR 100uH	
L701	1-410-521-11	INDUCTOR 100uH	
L890	1-410-525-11	INDUCTOR 220uH (G, IT)	
L891	1-410-525-11	INDUCTOR 220uH (G, IT)	
L892	1-410-525-11	INDUCTOR 220uH (G, IT)	
		< TRANSFORMER >	
PT801 ⚠	1-449-979-11	TRANSFORMER, POWER	

Ref. No.	Part No.	Description	Remark
		< TRANSISTOR >	
Q701	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q702	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q703	8-729-900-80	TRANSISTOR DTC114ES	
Q801	8-729-140-04	TRANSISTOR 2SB1116A-LK	
Q802	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q803	8-729-140-04	TRANSISTOR 2SB1116A-LK	
		< RESISTOR >	
R601	1-249-441-11	CARBON 100K 5% 1/4W	
R602	1-249-425-11	CARBON 4.7K 5% 1/4W	
R603	1-249-441-11	CARBON 100K 5% 1/4W	
R604	1-249-441-11	CARBON 100K 5% 1/4W	
R605	1-249-429-11	CARBON 10K 5% 1/4W	
R606	1-249-429-11	CARBON 10K 5% 1/4W	
R607	1-249-429-11	CARBON 10K 5% 1/4W	
R608	1-249-429-11	CARBON 10K 5% 1/4W	
R609	1-249-429-11	CARBON 10K 5% 1/4W	
R610	1-249-429-11	CARBON 10K 5% 1/4W	
R611	1-249-429-11	CARBON 10K 5% 1/4W	
R612	1-249-429-11	CARBON 10K 5% 1/4W	
R613	1-249-429-11	CARBON 10K 5% 1/4W	
R614	1-249-429-11	CARBON 10K 5% 1/4W	
R615	1-249-429-11	CARBON 10K 5% 1/4W	
R616	1-249-423-11	CARBON 3.3K 5% 1/4W	
R617	1-249-429-11	CARBON 10K 5% 1/4W	
R618	1-249-429-11	CARBON 10K 5% 1/4W	
R619	1-249-429-11	CARBON 10K 5% 1/4W	
R620	1-249-429-11	CARBON 10K 5% 1/4W	
R621	1-249-429-11	CARBON 10K 5% 1/4W	
R622	1-249-429-11	CARBON 10K 5% 1/4W	
R623	1-249-405-11	CARBON 100 5% 1/4W	
R624	1-249-417-11	CARBON 1K 5% 1/4W	
R625	1-249-425-11	CARBON 4.7K 5% 1/4W	
R701	1-249-425-11	CARBON 4.7K 5% 1/4W	
R702	1-249-429-11	CARBON 10K 5% 1/4W	
R703	1-249-393-11	CARBON 10 5% 1/4W	
R704	1-249-425-11	CARBON 4.7K 5% 1/4W	
R705	1-249-429-11	CARBON 10K 5% 1/4W	
R706	1-249-393-11	CARBON 10 5% 1/4W	
R707	1-247-903-00	CARBON 1M 5% 1/4W	
R708	1-249-429-11	CARBON 10K 5% 1/4W	
R709	1-249-429-11	CARBON 10K 5% 1/4W	
R710	1-249-429-11	CARBON 10K 5% 1/4W	
R711	1-249-393-11	CARBON 10 5% 1/4W	
R801	1-247-743-11	CARBON 220 5% 1/2W	
R802	1-249-429-11	CARBON 10K 5% 1/4W	
R803	1-249-425-11	CARBON 4.7K 5% 1/4W	
R804	1-249-425-11	CARBON 4.7K 5% 1/4W	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
R805	1-249-417-11	CARBON 1K 5% 1/4W	
R806	1-249-433-11	CARBON 22K 5% 1/4W	
R807 ⚠	1-247-702-11	CARBON 150 5% 1/4W	
R808	1-249-425-11	CARBON 4.7K 5% 1/4W	
R809	1-249-437-11	CARBON 47K 5% 1/4W	
RY801	1-515-617-11	RELAY	
		< SWITCH >	
S601	1-554-303-21	SWITCH, TACTILE (1)	
S602	1-554-303-21	SWITCH, TACTILE (2)	
S603	1-554-303-21	SWITCH, TACTILE (3)	
S604	1-554-303-21	SWITCH, TACTILE (4)	
S605	1-554-303-21	SWITCH, TACTILE (5)	
S606	1-554-303-21	SWITCH, TACTILE (6)	
S607	1-554-303-21	SWITCH, TACTILE (7)	
S608	1-554-303-21	SWITCH, TACTILE (8)	
S609	1-554-303-21	SWITCH, TACTILE (9)	
S610	1-554-303-21	SWITCH, TACTILE (0)	
S611	1-554-303-21	SWITCH, TACTILE (SHIFT A)	
S612	1-554-303-21	SWITCH, TACTILE (SHIFT B)	
S613	1-554-303-21	SWITCH, TACTILE (SHIFT C)	
S616	1-554-303-21	SWITCH, TACTILE (BAND)	
S617	1-554-303-21	SWITCH, TACTILE (MEMORY)	

Ref. No.	Part No.	Description	Remark
S618	1-554-303-21	SWITCH, TACTILE (MEMORY SCAN)	
S620	1-554-303-21	SWITCH, TACTILE (ONCE)	
S621	1-554-303-21	SWITCH, TACTILE (DAILY)	
S622	1-554-303-21	SWITCH, TACTILE (NEXT)	
S623	1-554-303-21	SWITCH, TACTILE (TIME +)	
S624	1-554-303-21	SWITCH, TACTILE (TIME -)	
S625	1-554-303-21	SWITCH, TACTILE (CLOCK)	
S626	1-554-303-21	SWITCH, TACTILE (SLEEP)	
S627	1-554-303-21	SWITCH, TACTILE (CONTROL)	
S628	1-554-303-21	SWITCH, TACTILE (CLEAR)	
S629	1-554-303-21	SWITCH, TACTILE (BACK)	
S630	1-554-303-21	SWITCH, TACTILE (SYSTEKM POWER)	
S631	1-554-303-21	SWITCH, TACTILE (FREQUENCY/TIME)	
S632	1-554-303-21	SWITCH, TACTILE (MODE)	
S633	1-554-303-21	SWITCH, TACTILE (MONO)	
S634	1-571-955-11	SWITCH, ROTARY (TUNING)	
		< CRYSTAL >	
X601	1-567-821-21	VIBRATOR, CRYSTAL (4.19MHz)	
X701	1-578-699-11	OSCILLATOR, CERAMIC (800KHz)	

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Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- G: Germany model
- IT: Italian model

TUNER SECTION

Ref.No.	Part No.	Description
C1	1-162-294-31	CERAMIC CHIP 0.001MF 20% 25V
C2	1-126-101-11	ELECT 100MF 20% 16V
C3	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C4	1-162-294-31	CERAMIC CHIP 0.001MF 20% 25V
C5	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C6	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C7	1-163-059-00	(G,IT)....CERAMIC MELF 0.01MF 20% 16V
C8	1-163-059-00	(G,IT)....CERAMIC MELF 0.01MF 20% 16V
C9	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C11	1-101-005-00	(G,IT)....CERAMIC 0.022MF 50V
C21	1-101-006-00	CERAMIC 0.047MF 50V
C22	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C23	1-124-477-11	ELECT 47MF 20% 16V
C24	1-123-382-00	ELECT 3.3MF 20% 50V
C25	1-163-063-00	CERAMIC MELF 0.022MF 25V
C26	1-163-019-00	CERAMIC CHIP 0.0068 20% 12V
C27	1-162-516-11	(AEP,UK)..CERAMIC CHIP 100PF 10% 50V
C27	1-163-007-11	(G,IT)....CERAMIC CHIP 680PF 20% 50V
C28	1-124-791-11	ELECT 1.0MF 20% 50V
C29	1-162-516-11	(G,IT)....CERAMIC CHIP 100PF 10% 50V
C30	1-124-791-11	ELECT 1.0MF 20% 50V
C31	1-124-902-00	ELECT 0.47MF 20% 50V
C32	1-124-463-00	ELECT 0.1MF 20% 50V
C33	1-130-481-00	FILM 0.0068MF 5% 50V
C34	1-123-382-00	ELECT 3.3MF 20% 50V
C35	1-130-481-00	FILM 0.0068MF 5% 50V
C36	1-123-382-00	ELECT 3.3MF 20% 50V
C37	1-123-875-11	ELECT 10MF 20% 50V
C39	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C40	1-124-463-00	ELECT 0.1MF 20% 50V
C41	1-124-927-11	ELECT 4.7MF 20% 50V
C42	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C43	1-126-176-11	ELECT 220MF 20% 10V
C44	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C45	1-123-382-00	ELECT 3.3MF 20% 50V
C46	1-161-375-00	CERAMIC CHIP 0.0022MF 20% 25V
C47	1-163-170-00	(G,IT)....CERAMIC CHIP 0.0047MF 20% 25V
C48	1-123-382-00	ELECT 3.3MF 20% 50V
C49	1-161-375-00	CERAMIC CHIP 0.0022MF 20% 25V
C50	1-163-170-00	(G,IT)....CERAMIC CHIP 0.0047MF 20% 25V
C51	1-124-477-11	ELECT 47MF 20% 16V
C53	1-163-105-00	CERAMIC CHIP 33PF 5% 50V
C54	1-101-005-00	(G,IT)....CERAMIC 0.022MF 50V
C61	1-163-063-00	CERAMIC MELF 0.022MF 25V
C62	1-163-063-00	CERAMIC MELF 0.022MF 25V
C63	1-163-063-00	CERAMIC MELF 0.022MF 25V
C64	1-163-063-00	CERAMIC MELF 0.022MF 25V
C65	1-163-063-00	CERAMIC MELF 0.022MF 25V
C66	1-163-063-00	CERAMIC MELF 0.022MF 25V
C67	1-102-120-00	CERAMIC 0.0018MF 10% 50V
C68	1-163-111-11	CERAMIC CHIP 0.0015MF 20% 25V
C69	1-163-063-00	CERAMIC MELF 0.022MF 25V
C70	1-163-063-00	CERAMIC MELF 0.022MF 25V
C71	1-163-063-00	CERAMIC MELF 0.022MF 25V
C72	1-163-063-00	CERAMIC MELF 0.022MF 25V
C73	1-163-063-00	CERAMIC MELF 0.022MF 25V
C81	1-102-961-00	CERAMIC 27PF 5% 50V
C82	1-102-961-00	CERAMIC 27PF 5% 50V
C83	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C84	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C85	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C86	1-124-477-11	ELECT 47MF 20% 16V
C87	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C88	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C101	1-124-925-11	ELECT 2.2MF 20% 50V
C102	1-124-463-00	ELECT 0.1MF 20% 50V
C103	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C104	1-163-059-00	CERAMIC MELF 0.01MF 20% 16V
C105	1-124-477-11	ELECT 47MF 20% 16V
C106	1-136-173-00	MYLAR 0.47MF 5% 50V
C107	1-124-463-00	ELECT 0.1MF 20% 50V
C108	1-163-063-00	(G,IT)....CERAMIC MELF 0.022MF 25V
CF1	1-567-389-11	FILTER, CERAMIC
CF2	1-567-389-11	FILTER, CERAMIC
CF3	1-567-389-11	(G,IT).....FILTER, CERAMIC
CF21	1-577-075-11	OSCILLATOR, CERAMIC (19kHz)
CFT21	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)
CNJ1	*1-565-343-11	PIN, CONNECTOR 7P
CNJ3	*1-573-067-11	CONNECTOR, BOARD TO BOARD 8P
D61	8-719-912-20	DIODE 1SS120
FE1	1-463-857-11	(G,IT).....FRONT END (FM)
FE1	1-463-862-21	(AEP,UK)...FRONT END (FM)
FE61	1-236-462-11	ENCAPSULATED COMPONENT (MW RF BLOCK)
FE62	1-236-463-11	ENCAPSULATED COMPONENT (LW RF BLOCK)
IC21	8-759-821-45	IC LA1851N
IC81	8-759-820-91	IC LC7218
L1	1-410-645-31	MICRO INDUCTOR 100UH
L2	1-410-645-31	(G,IT)....MICRO INDUCTOR 100UH
L21	1-407-500-00	MICRO INDUCTOR 4.7UH
L61	1-410-525-11	MICRO INDUCTOR 220UH
LPF21	1-235-164-00	FILTER, LOW PASS
LPF22	1-235-164-00	FILTER, LOW PASS

TUNER SECTION

Ref.No.	Part No.	Description
Q1	8-729-230-99	TRANSISTOR 2SC2669-OY
Q2	8-729-230-99	TRANSISTOR 2SC2669-OY
Q3	8-729-230-99	(G,IT)....TRANSISTOR 2SC2669-OY
Q4	8-729-230-99	(G,IT)....TRANSISTOR 2SC2669-OY
Q21	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q22	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q23	8-729-900-61	TRANSISTOR DTA114ES
Q24	8-729-900-80	TRANSISTOR DTC114ES
Q26	8-729-900-80	TRANSISTOR DTC114ES
Q61	8-729-900-80	TRANSISTOR DTC114ES
Q62	8-729-900-80	TRANSISTOR DTC114ES
Q63	8-729-900-80	TRANSISTOR DTC114ES
Q64	8-729-820-24	TRANSISTOR 2SC3330-T
Q65	8-729-821-04	TRANSISTOR 2SA1317-STU
Q66	8-729-900-80	TRANSISTOR DTC114ES
Q81	8-729-900-61	TRANSISTOR DTA114ES
Q82	8-729-900-80	TRANSISTOR DTC114ES
Q83	8-729-202-67	TRANSISTOR 2SK246-GR3
Q84	8-729-107-84	TRANSISTOR 2SC3113A
Q85	8-729-202-67	TRANSISTOR 2SK246-GR3
Q86	8-729-107-84	TRANSISTOR 2SC3113A
R1	⚠.1-249-397-11	(G,IT).....CARBON (SMALL)22 5% 1/4W F
R1	⚠.1-249-401-11	(AEP,UK)...CARBON (SMALL)47 5% 1/4W F
R3	1-249-329-11	CARBON MELF 330 5% 1/8W
R4	1-249-329-11	CARBON MELF 330 5% 1/8W
R5	1-249-329-11	CARBON MELF 330 5% 1/8W
R6	1-249-350-11	CARBON MELF 18K 5% 1/8W
R7	1-249-329-11	CARBON MELF 330 5% 1/8W
R8	1-249-332-11	CARBON MELF 560 5% 1/8W
R9	1-249-352-11	CARBON MELF 27K 5% 1/8W
R10	1-249-329-11	(G,IT)....CARBON MELF 330 5% 1/8W
R11	1-249-350-11	(G,IT)....CARBON MELF 18K 5% 1/8W
R12	1-249-329-11	(G,IT)....CARBON MELF 330 5% 1/8W
R13	1-249-334-11	(G,IT)....CARBON MELF 820 5% 1/8W
R14	1-249-352-11	(G,IT)....CARBON MELF 27K 5% 1/8W
R15	1-249-347-11	(G,IT)....CARBON MELF 10K 5% 1/8W
R16	1-249-343-11	(G,IT)....CARBON MELF 4.7K 5% 1/8W
R21	⚠.1-249-404-00	CARBON (SMALL)82 5% 1/4W F
R22	⚠.1-249-430-11	CARBON (SMALL)12K 5% 1/4W F
R23	1-249-335-11	CARBON MELF 1K 5% 1/8W
R24	1-249-353-11	CARBON MELF 33K 5% 1/8W
R25	1-249-346-11	CARBON MELF 8.2K 5% 1/8W
R26	1-249-340-11	(G,IT)....CARBON MELF 2.7K 5% 1/8W
R27	⚠.1-249-432-11	CARBON (SMALL)18K 5% 1/4W F
R28	1-249-423-11	CARBON (SMALL)3.3K 5% 1/4W
R29	1-249-347-11	CARBON MELF 10K 5% 1/8W
R31	1-249-331-11	CARBON MELF 470 5% 1/8W
R32	1-249-347-11	CARBON MELF 10K 5% 1/8W
R33	1-249-347-11	CARBON MELF 10K 5% 1/8W
R34	⚠.1-249-437-11	CARBON (SMALL)47K 5% 1/4W F
R35	1-249-355-11	CARBON MELF 47K 5% 1/8W
R37	1-249-359-11	CARBON MELF 100K 5% 1/8W
R38	1-249-363-11	CARBON MELF 220K 5% 1/8W
R39	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R40	1-249-338-11	CARBON MELF 1.8K 5% 1/8W
R41	1-249-344-11	CARBON MELF 5.6K 5% 1/8W
R42	1-249-359-11	CARBON MELF 100K 5% 1/8W
R43	1-249-363-11	CARBON MELF 220K 5% 1/8W
R44	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R45	1-249-338-11	CARBON MELF 1.8K 5% 1/8W
R46	1-249-344-11	CARBON MELF 5.6K 5% 1/8W
R47	⚠.1-249-409-11	CARBON (SMALL)220 5% 1/4W F
R61	1-249-359-11	CARBON MELF 100K 5% 1/8W
R62	1-249-355-11	CARBON MELF 47K 5% 1/8W
R64	1-249-351-11	CARBON MELF 22K 5% 1/8W
R65	1-249-355-11	CARBON MELF 47K 5% 1/8W
R66	1-215-493-00	CARBON MELF 1M 5% 1/5W
R67	1-249-359-11	CARBON MELF 100K 5% 1/8W
R68	1-249-352-11	CARBON MELF 27K 5% 1/8W
R69	1-249-351-11	CARBON MELF 22K 5% 1/8W
R70	1-249-331-11	CARBON MELF 470 5% 1/8W
R71	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R72	1-249-351-11	CARBON MELF 22K 5% 1/8W
R73	1-249-347-11	CARBON MELF 10K 5% 1/8W
R74	1-249-347-11	CARBON MELF 10K 5% 1/8W
R75	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R81	1-249-335-11	CARBON MELF 1K 5% 1/8W
R82	1-249-335-11	CARBON MELF 1K 5% 1/8W
R83	1-249-335-11	CARBON MELF 1K 5% 1/8W
R84	1-249-335-11	CARBON MELF 1K 5% 1/8W
R85	1-249-347-11	CARBON MELF 10K 5% 1/8W
R86	1-249-335-11	CARBON MELF 1K 5% 1/8W
R87	1-249-347-11	CARBON MELF 10K 5% 1/8W
R88	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R89	1-249-335-11	CARBON MELF 1K 5% 1/8W
R90	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R91	1-249-335-11	CARBON MELF 1K 5% 1/8W
R92	⚠.1-249-401-11	CARBON (SMALL)47 5% 1/4W F
R101	1-249-341-11	CARBON MELF 3.3K 5% 1/8W
R102	1-249-332-11	CARBON MELF 560 5% 1/8W
R103	1-249-335-11	CARBON MELF 1K 5% 1/8W
R104	1-249-328-11	CARBON MELF 270 5% 1/8W
R105	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R106	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R107	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R108	1-249-323-11	CARBON MELF 100 5% 1/8W
R109	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R110	⚠.1-249-405-11	CARBON (SMALL)100 5% 1/4W F
R111	1-249-341-11	CARBON MELF 3.3K 5% 1/8W
R112	1-249-332-11	CARBON MELF 560 5% 1/8W
R113	1-249-335-11	CARBON MELF 1K 5% 1/8W
R114	1-249-328-11	CARBON MELF 270 5% 1/8W
R115	1-249-351-11	CARBON MELF 22K 5% 1/8W
R116	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R117	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R118	1-249-323-11	CARBON MELF 100 5% 1/8W
RV21	1-238-013-11	(AEP,UK)...RES, ADJ, CARBON 2.2K
RV21	1-238-015-11	(G,IT).....RES, ADJ, CARBON 4.7K
RV22	1-238-017-11	RES, ADJ, CARBON 22K
RV24	1-238-017-11	(AEP,UK)...RES, ADJ, CARBON 22K
RV24	1-238-019-11	(G,IT).....RES, ADJ, CARBON 47K
T21	1-404-807-11	TRANSFORMER, DISCRIMINATOR
T23	1-236-465-11	(G,IT)....ENCAPSULATED COMPONENT
TM1	*1-537-138-31	TERMINAL BOARD (ANT)(ANTENNA)
TP1	*1-560-060-00	PIN, CONNECTOR 2P
XT81	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		*************	
5	1-575-666-11	WIRE, FLAT TYPE (11 CORE)	
6	* 1-575-851-11	WIRE, FLAT TYPE (7 CORE)	
11	* 1-573-066-11	CONNECTOR, BOARD TO BOARD 12P	
17	1-589-204-11	PC BOARD, MOUNTED (AEP, UK)	
17	1-589-210-11	PC BOARD, MOUNTED (G, IT)	
⚠CNJ801	· 1-526-751-11	OUTLET, AC (UK)	
⚠CNJ802	· 1-526-794-11	OUTLET, AC (AEP, G, IT)	
⚠CNJ803	· 1-526-794-11	OUTLET, AC (AEP, G, IT)	
⚠CNP801	· 1-575-651-11	CORD, POWER (AEP, G, IT)	
⚠CNP801	· 1-575-652-11	CORD, POWER (UK)	
F801 ⚠	· 1-532-286-00	FUSE, TIME-LAG (2.5A)	

****

ACCESSORY & PACKING MATERIAL

Ref. No.	Part No.	Description	Remark
	3-312-970-00	SHEET, PROTECTION	
	* 4-929-563-01	CUSHION	

****

HARDWARE LIST

Ref. No.	Part No.	Description
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S
#3	7-682-548-04	SCREW +BVTT 3X8 (S)
#4	7-621-773-93	SCREW (PANEL 2.6 TP2)

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

9-956-426-11

Sony Corporation
Audio Group

English
91D0659-1
Printed in Japan

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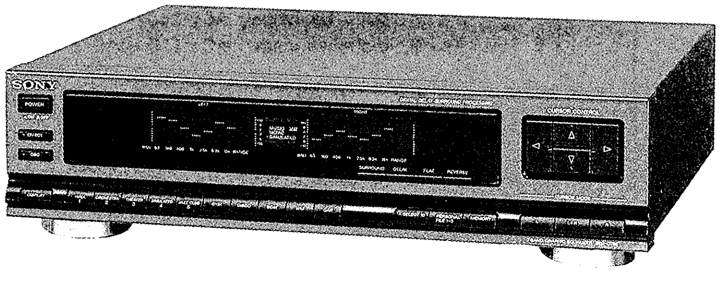
Published by Customer Relations and Service Group

SEQ-D705

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model



SPECIFICATION

Input	LINE IN: Phono jacks, 245 mV (−10 dB), 50 kohms
Output	LINE OUT: Phono jacks, 245 mV (−10 dB), Load impedance: more than 10 kohms
Graphic equalizer	Boost/cut range: ± 10 dB Center frequencies: 63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 15 kHz
Frequency response (with EQUALIZATION OFF)	LINE IN: 20 Hz to 50 kHz, $^{+0}_{-1.5}$ dB
Harmonic distortion	LINE IN: Less than 0.02 % (at 1kHz, 1V output)
Signal-to-noise ratio (with EQUALIZATION OFF)	LINE IN: Better than 90 dB (A network, 1V output)
Power requirements	AEP, Germany, Italian model: 220—230V AC, 50/60Hz UK, model: 240V AC, 50/60Hz E, Saudi Arabia, Australian model: 110—120V or 220—240V AC adjustable, 50/60Hz

Power consumption	15 W
AC outlet	100 W max. unswitched
Dimensions	Approx. 355 × 94.5 × 313.5 mm (w/h/d) (14 × 3 3/4 × 12 3/8 inches)
Weight	Approx. 2.7 kg (5 lb 15 oz)
Accessories supplied	Connecting cords (2)

Design and specifications subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

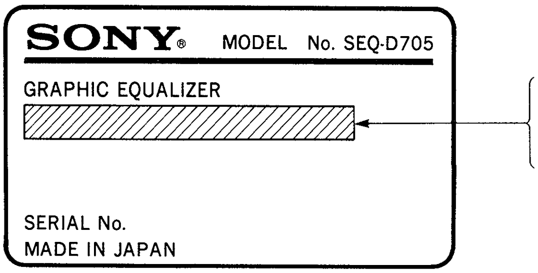
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

GRAPHIC EQUALIZER

SONY®

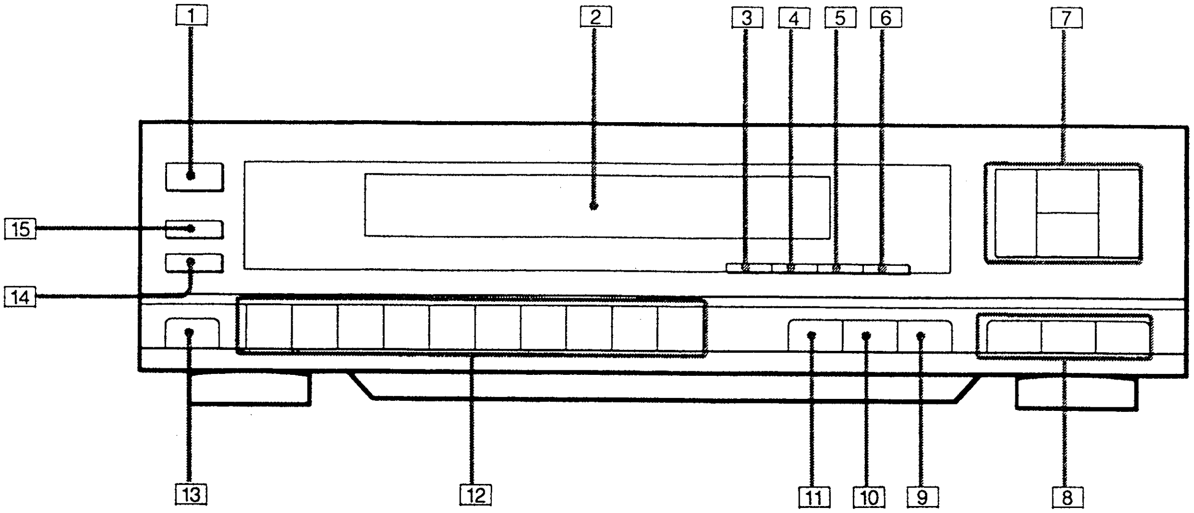
MODEL IDENTIFICATION
—Specification Label—


SONY® MODEL No. SEQ-D705
GRAPHIC EQUALIZER
SERIAL No.
MADE IN JAPAN

AEP, Germany, Italian model: AC: 220V—230V~50/60Hz
UK model: AC: 240V~50/60Hz
E, Saudi Arabia, Australian model: AC: 110—120V/220—240V~15W 50/60Hz

SECTION 1
GENERAL

1-1. LOCATION OF CONTROLS


1
2
3
4
5
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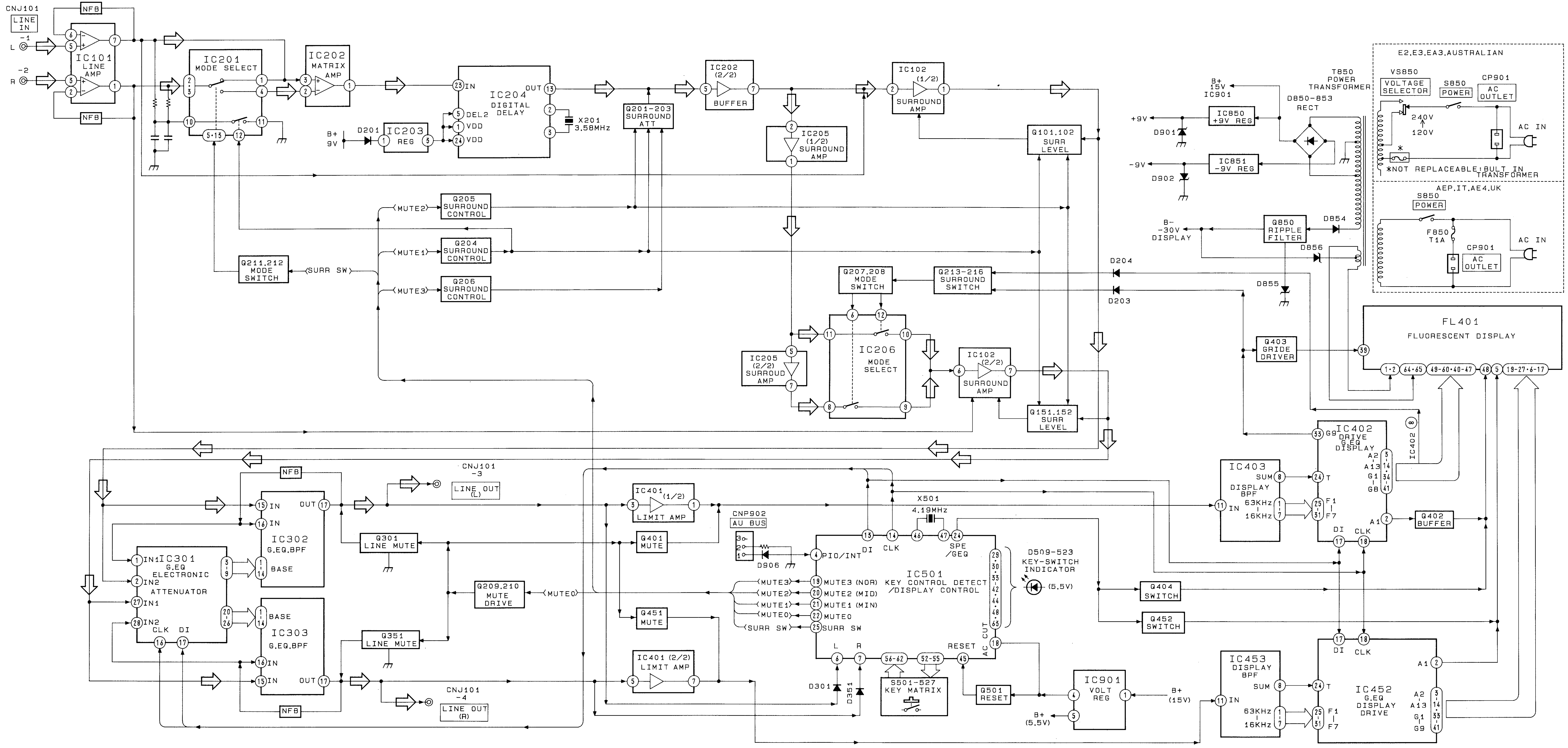
7
15
14
13
12
11
10
9
8

1 POWER switch
2 Display window
3 SURROUND button
4 DELAY button
5 FLAT button
6 REVERSE button
7 CURSOR CONTROL buttons
8 L/L+R/R buttons
9 MEMORY button and indicator
10 PERSONAL FILE 1 – 5 button and indicator
11 SELECT 10 button and indicator
12 Numeric buttons and indicators
13 DISPLAY button
14 DSC (Dynamic Sound Control) button and indicator
15 EFFECT button and indicator

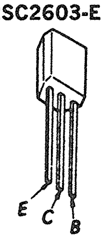
SECTION 2
DIAGRAMS

2-1. BLOCK DIAGRAM

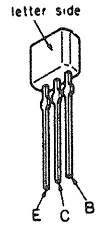

CNJ101
LINE IN
-1
L
-2
R
NFB
IC101 LINE AMP
IC201 MODE SELECT
IC202 MATRIX AMP
IC204 DIGITAL DELAY
IN
OUT
DEL2
VDD
X201 3.58MHz
IC203 REG
D201
B+ 9V
Q201-203 SURROUND ATT
IC202 (2/2) BUFFER
IC102 (1/2) SURROUND AMP
IC205 (1/2) SURROUND AMP
Q101,102 SURR LEVEL
Q205 SURROUND CONTROL
Q204 SURROUND CONTROL
Q206 SURROUND CONTROL
MUTE2
MUTE1
MUTE3
Q211,212 MODE SWITCH
SURR SW
Q207,208 MODE SWITCH
Q213-216 SURROUND SWITCH
IC205 (2/2) SURROUND AMP
IC206 MODE SELECT
IC102 (2/2) SURROUND AMP
Q151,152 SURR LEVEL
D204
D203
B+ 15V IC901
T850 POWER TRANSFORMER
D850-853 RECT
+9V
IC850 +9V REG
D901
-9V
IC851 -9V REG
D902
B- -30V DISPLAY
Q850 RIPPLE FILTER
D854
D856
D855
E2,E3,EA3,AUSTRALIAN
VS850 VOLTAGE SELECTOR
S850 POWER
CP901 AC OUTLET
240V
120V
AC IN
*NOT REPLACEABLE:BULT IN TRANSFORMER
AEP,IT,AE4,UK
S850 POWER
F850 T1A
CP901 AC OUTLET
AC IN
FL401 FLUORESCENT DISPLAY
Q403 GRIDE DRIVER
IC402 DRIVE G.EQ DISPLAY
IC403 DISPLAY BPF
SUM
63KHz | 16KHz
IN
T
F1 | F7
A2 A13 G1 | G8
A1
DI CLK
Q402 BUFFER
CNJ101 -3 LINE OUT (L)
IC302 G.EQ,BPF
IC301 G.EQ ELECTRONIC ATTENUATOR
IN1 IN2
CLK DI
BASE
IC303 G.EQ,BPF
Q301 LINE MUTE
Q351 LINE MUTE
Q209,210 MUTE DRIVE
MUTE0
IC401 (1/2) LIMIT AMP
IC401 (2/2) LIMIT AMP
Q401 MUTE
Q451 MUTE
CNP902 AU BUS
D906
X501 4.19MHz
IC501 KEY CONTROL DETECT /DISPLAY CONTROL
PIO/INT
DI CLK SPE /GEQ
MUTE3 (NOR)
MUTE2 (MID)
MUTE1 (MIN)
MUTE0
SURR SW
L R
RESET
AC CUT
D509-523 KEY-SWITCH INDICATOR
(5.5V)
Q404 SWITCH
Q452 SWITCH
S501-527 KEY MATRIX
D301
D351
Q501 RESET
IC901 VOLT REG
B+ (15V)
B+ (5.5V)
IC453 DISPLAY BPF
IC452 G.EQ DISPLAY DRIVE
G1 G9
CNJ101 -4 LINE OUT (R)

2-2. SEMICONDUCTOR LEAD LAYOUTS

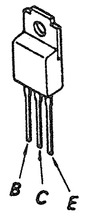
DTA114ES
DTC114ES
2SC2603-EF



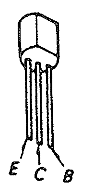
2SA1175-HFE


letter side
E
C
B

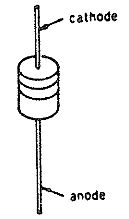
2SB1094



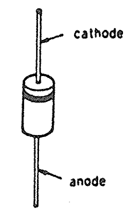
2SC3623A-LK



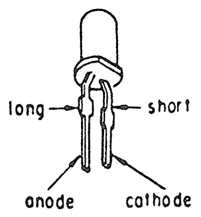
HZS6A1L
HZS6B1L
HZS3O-2L
UZL-7M1
1SS120
11ES2


cathode
anode

UZP6.8BC


cathode
anode

SEL2210S-C


long
short
anode
cathode

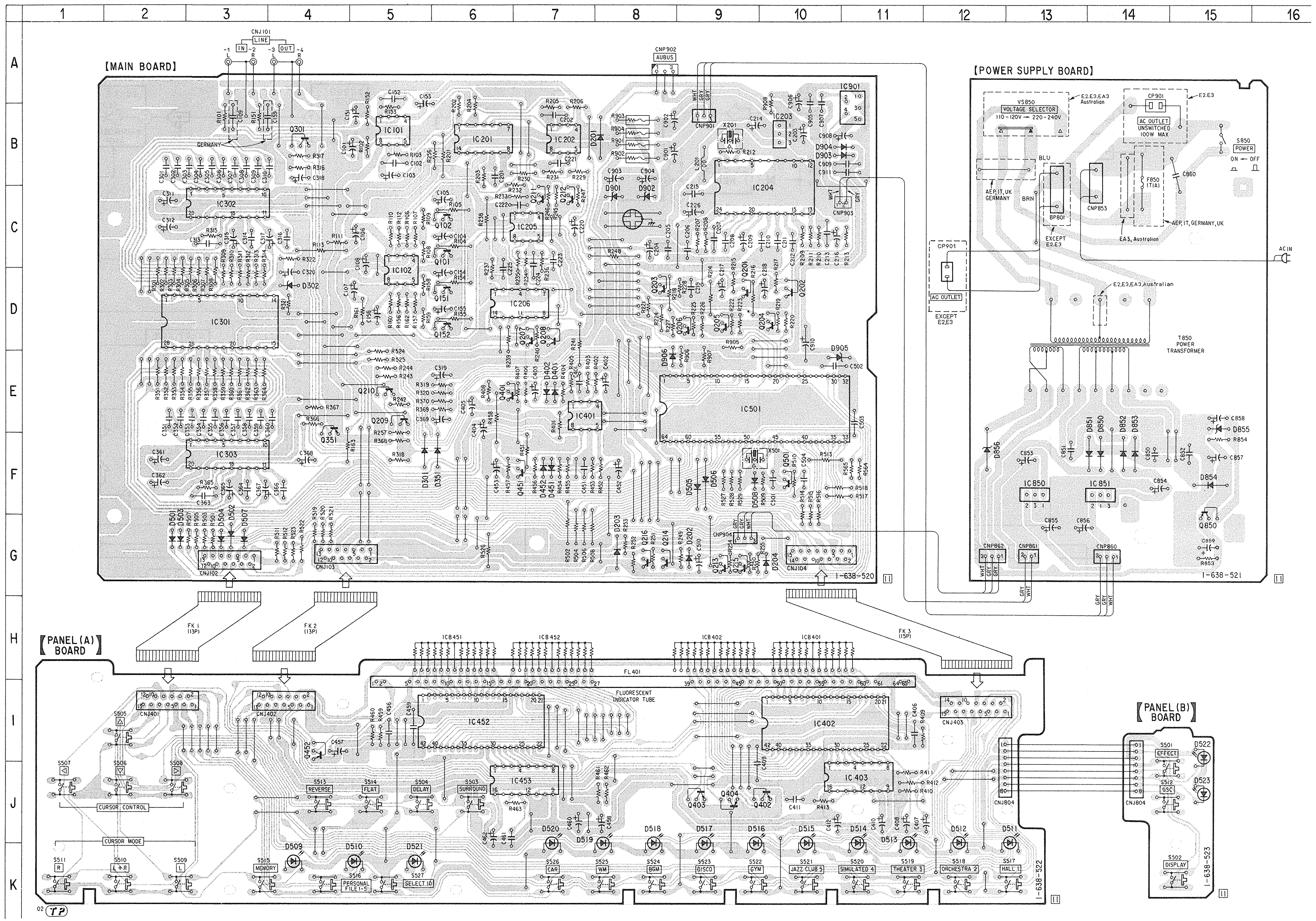
Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D201	B-8	IC201	B-6
D202	G-9	IC202	B-7
D203	G-8	IC203	B-10
D204	G-10	IC204	C-10
D301	F-5	IC205	C-7
D302	D-4	IC206	D-7
D351	F-6	IC301	D-3
D401	E-7	IC302	C-3
D402	E-7	IC303	F-3
D451	F-7	IC401	E-7
D452	F-7	IC402	I-10
D501	G-2	IC403	J-11
D502	G-3	IC452	I-6
D503	G-2	IC453	J-7
D504	G-3	IC501	E-9
D505	F-9	IC850	F-13
D506	F-9	IC851	F-14
D507	G-3	IC901	A-11
D508	F-9		
D509	K-4	Q101	C-6
D510	K-5	Q102	C-6
D511	J-13	Q151	D-6
D512	J-12	Q152	D-6
D513	J-11	Q201	D-9
D514	J-11	Q202	D-10
D515	J-10	Q203	D-8
D516	J-9	Q204	D-10
D517	J-9	Q205	D-9
D518	J-8	Q206	D-9
D519	J-7	Q207	D-7
D520	J-7	Q208	D-7
D521	K-5	Q209	E-5
D522	I-15	Q210	E-5
D523	J-15	Q211	C-7
D850	F-14	Q212	C-7
D851	F-14	Q213	G-9
D852	F-14	Q214	G-8
D853	F-14	Q215	G-9
D854	F-15	Q216	G-8
D855	E-15	Q301	B-4
D856	F-12	Q351	F-4
D901	C-8	Q401	E-6
D902	C-8	Q402	J-10
D903	B-10	Q403	J-9
D904	B-10	Q404	J-9
D905	E-11	Q451	F-7
D906	E-8	Q452	I-4
		Q501	F-10
IC101	B-5	Q850	G-15
IC102	D-5		

Note:

- ○—— : parts extracted from the component side.
- ▒ : Pattern on the side which is seen.
- IT: Italian model
- EA3: Saudi Arabia model

2-3. PRINTED WIRING BOARDS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11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
K
[MAIN BOARD]
CNJ101
LINE
IN
OUT
CNP902
AUBUS
IC101
IC102
IC201
IC202
IC203
IC204
IC205
IC206
IC301
IC302
IC303
IC401
IC501
IC901
1-638-520
CNJ102
CNJ103
CNJ104
FK 1 (15P)
FK 2 (15P)
FK 3 (15P)
[POWER SUPPLY BOARD]
VS850
VOLTAGE SELECTOR
110-120V 220-240V
CP901
AC OUTLET
UNSWITCHED 100W MAX
S850
POWER
ON — OFF
T850
POWER TRANSFORMER
F850
IC850
IC851
CNP862
CNP861
CNP860
1-638-521
AC IN
EXCEPT E2,E3
E2,E3,EA3, Australian
AEP,IT,GERMANY,UK
EA3, Australian
[PANEL (A) BOARD]
FL401
FLUORESCENT INDICATOR TUBE
IC451
IC452
IC453
IC402
IC403
CNJ401
CNJ402
CNJ403
CNJ804
CURSOR CONTROL
CURSOR MODE
S513 REVERSE
S514 FLAT
S504 DELAY
S503 SURROUND
S515 MEMORY
S516 PERSONAL FILE 1-5
S527 SELECT
S526 CAR
S525 WM
S524 BGM
S523 DISCO
S522 GYM
S521 JAZZ CLUB 5
S520 SIMULATED 4
S519 THEATER 3
S518 ORCHESTRA 2
S517 HALL 1
1-638-522
[PANEL (B) BOARD]
S501 EFFECT
S512 OSC
S502 DISPLAY
D522
D523
1-638-523

2-4. SCHEMATIC DIAGRAM • Refer to page 13 for IC Block Diagrams.

【MAIN BOARD】
IC101 LINE AMP
IC201 MODE SELECT
IC202 MATRIX AMP
IC203 VOLTAGE REG
IC204 DIGITAL DELAY
IC205 SURROUND AMP
IC102 SURROUND AMP
IC206 MODE SELECT
IC202 BUFFER
IC501 KEY CONTROL DETECT DISPLAY CONTROL
IC901 VOLTAGE REG
IC401 LIMIT AMP
IC302 G.EQ.BPF
IC301 G.EQ.ELECTRONIC ATTENUATOR
IC303 G.EQ.BPF
LINE IN
LINE OUT
TO POWER SUPPLY BOARD A
TO POWER SUPPLY BOARD C
TO POWER SUPPLY BOARD B
FK1
FK2
FK3
【PANEL (A) BOARD】
FL401 FLUORESCENT INDICATOR TUBE
IC402 G.EQ. DISPLAY DRIVE
IC452 G.EQ. DISPLAY DRIVE
IC403 XR-1091 DISPLAY-BPF
IC453 XR-1091 DISPLAY-BPF
TO MAIN BOARD D CNJ102
TO MAIN BOARD E CNJ103
TO MAIN BOARD F CNJ104
【PANEL (B) BOARD】
MEMORY
P.F
M1
M2
M3
M4
EFFECT
DISPLAY
【POWER SUPPLY BOARD】
IC850 TA78005 +5VREG
IC851 TA79005 -5VREG
TO MAIN BOARD B CNP903
TO MAIN BOARD A CNP901
TO MAIN BOARD C CNP904
T850 POWER TRANSFORMER
S850 VOLTAGE SELECTOR
S851 POWER
AC IN
AEP.IT.GERMANY.UK
EXCEPT E2.E3
* NOT REPLACEABLE BUILT IN TRANSFORMER

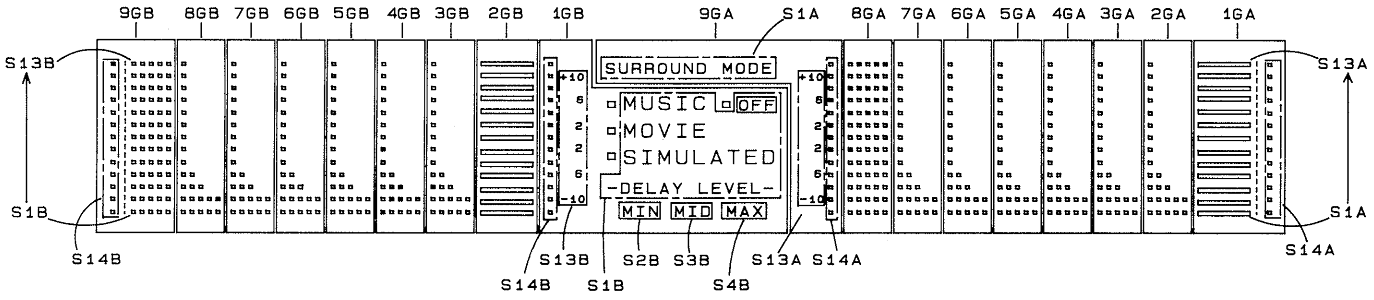
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.
- ─▭─ : printed resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

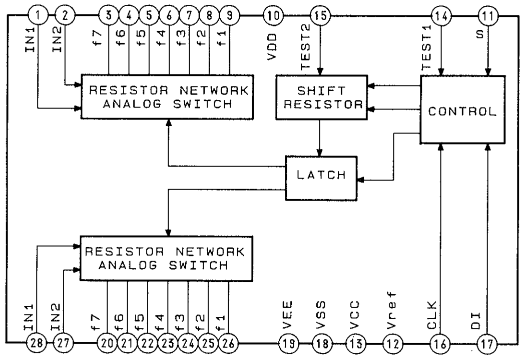
- B+ : B+ Line
- B− : B– Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark: DEMO MODE
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : LINE IN
- IT: Italian model
- EA3: Saudi Arabia model

● FL401 FLUORESCENT INDICATOR TUBE

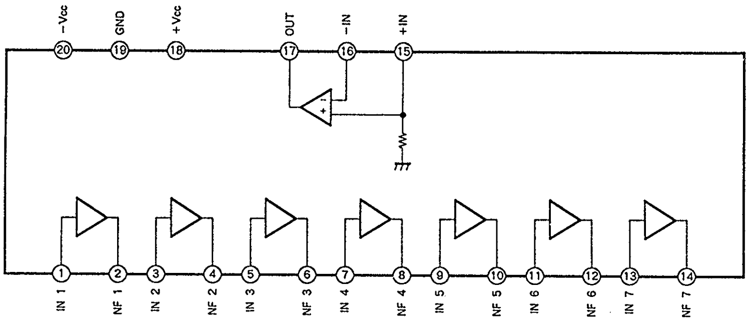

9GB
8GB
7GB
6GB
5GB
4GB
3GB
2GB
1GB
9GA
S1A
8GA
7GA
6GA
5GA
4GA
3GA
2GA
1GA
S13B
S1B
S14B
S13A
S1A
S14A
SURROUND MODE
MUSIC
OFF
MOVIE
SIMULATED
-DELAY LEVEL-
MIN
MID
MAX
+10
6
2
2
6
-10
S13B
S14B
S1B
S2B
S3B
S4B
S13A
S14A

● IC BLOCK Diagrams

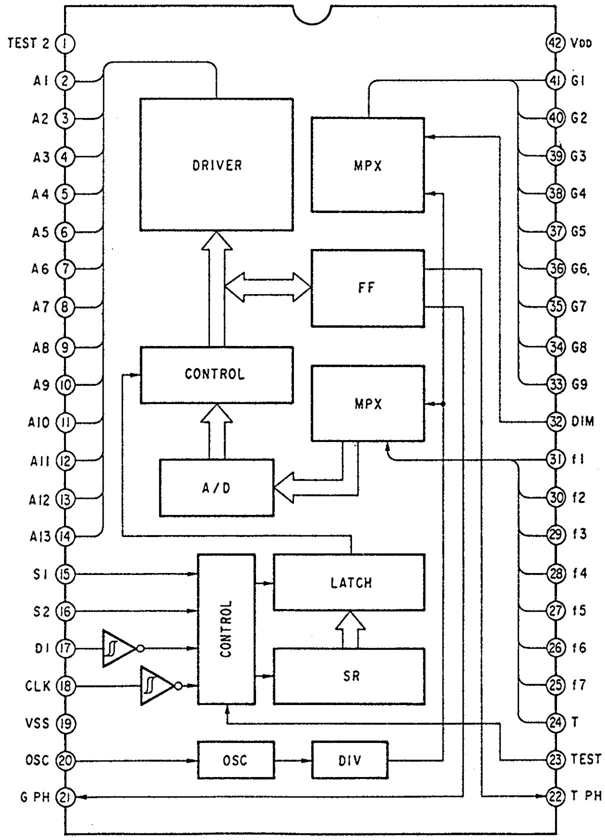
IC301 LC7520


IN1
IN2
f7
f6
f5
f4
f3
f2
f1
VDD
TEST2
TEST1
S
RESISTOR NETWORK ANALOG SWITCH
SHIFT RESISTOR
CONTROL
LATCH
RESISTOR NETWORK ANALOG SWITCH
VEE
VSS
VCC
Vref
CLK
DI

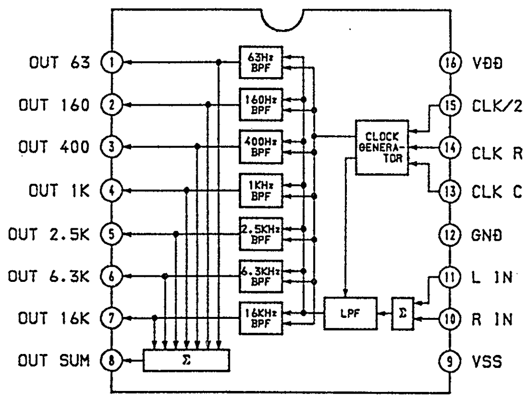
IC302, 303 M5289P


-Vcc
GND
+Vcc
OUT
-IN
+IN
IN 1
NF 1
IN 2
NF 2
IN 3
NF 3
IN 4
NF 4
IN 5
NF 5
IN 6
NF 6
IN 7
NF 7

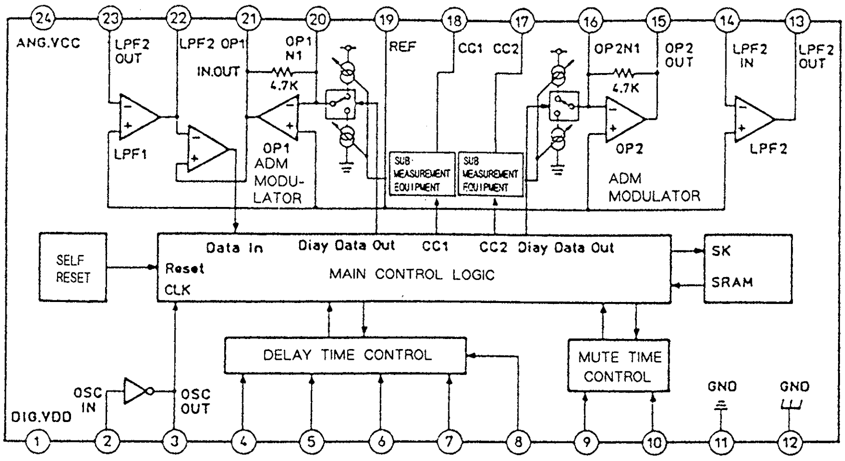
IC402 LC7565K


TEST 2
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
S1
S2
DI
CLK
VSS
OSC
G PH
VDD
G1
G2
G3
G4
G5
G6
G7
G8
G9
DIM
f1
f2
f3
f4
f5
f6
f7
T
TEST 1
T PH
DRIVER
MPX
FF
CONTROL
MPX
A/D
CONTROL
LATCH
SR
OSC
DIV

IC403, 453 XR1091DCP


OUT 63
OUT 160
OUT 400
OUT 1K
OUT 2.5K
OUT 6.3K
OUT 16K
OUT SUM
VDD
CLK/2
CLK R
CLK C
GND
L IN
R IN
VSS
63Hz BPF
160Hz BPF
400Hz BPF
1KHz BPF
2.5KHz BPF
6.3KHz BPF
16KHz BPF
CLOCK GENERATOR
LPF
Σ
Σ

IC204 M50198P


ANG.VCC
LPF2 OUT
LPF2 OP1 IN.OUT
OP1 N1
4.7K
REF
CC1
CC2
OP2N1
OP2 OUT
LPF2 IN
LPF2 OUT
LPF1
OP1
ADM MODULATOR
SUB MEASUREMENT EQUIPMENT
SUB MEASUREMENT EQUIPMENT
4.7K
OP2
ADM MODULATOR
LPF2
SELF RESET
Data In
Diay Data Out
CC1
CC2
Diay Data Out
Reset
CLK
MAIN CONTROL LOGIC
SK
SRAM
DELAY TIME CONTROL
MUTE TIME CONTROL
OSC IN
OSC OUT
DIG.VDD
GND
GND

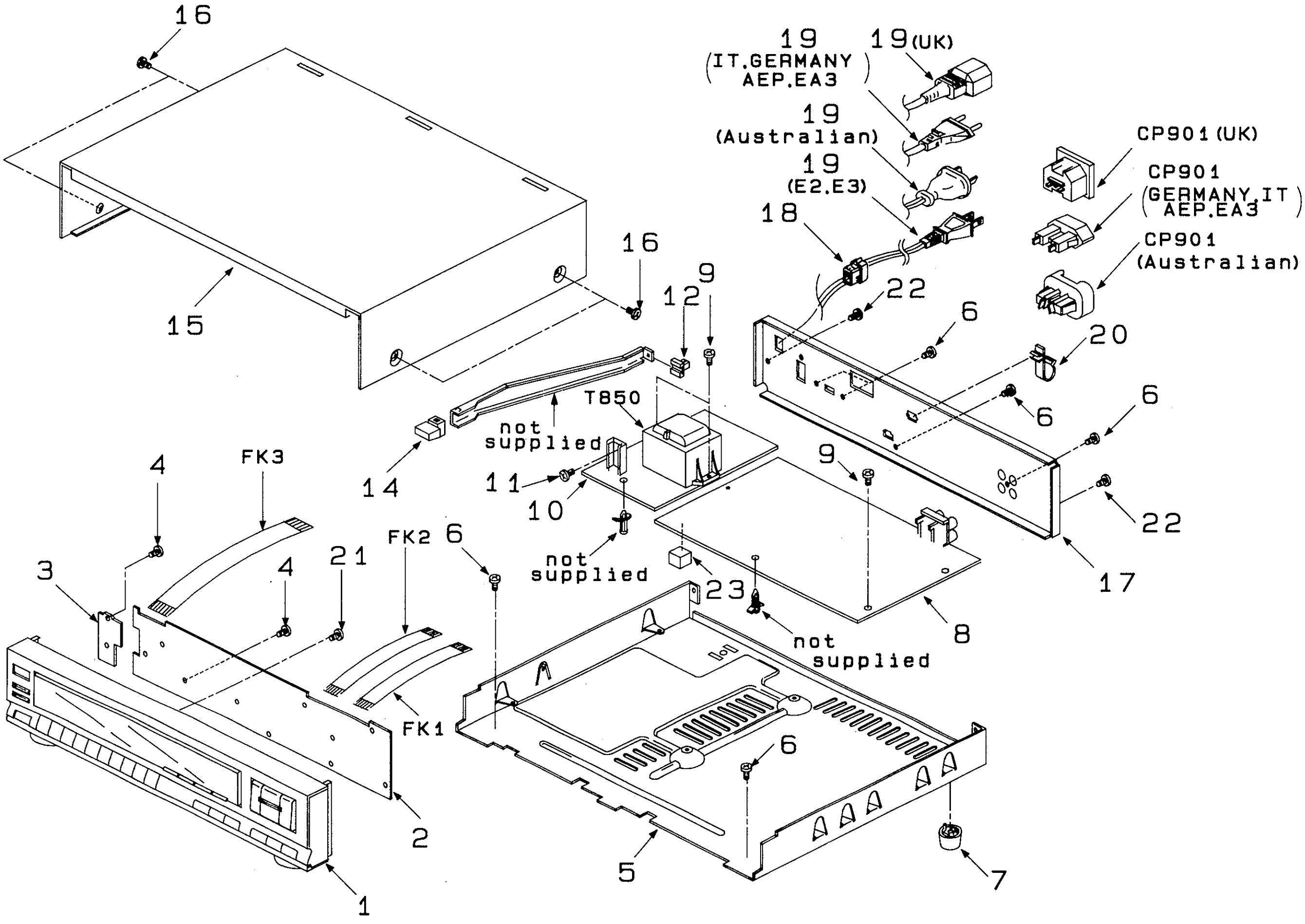
SECTION 3
EXPLODED VIEW

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE)...(RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Hardware(# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- IT: Italian model
- EA3: Saudi Arabia model


16
19 (IT.GERMANY AEP.EA3)
19(UK)
19 (Australian)
19 (E2.E3)
18
CP901 (UK)
CP901 (GERMANY,IT AEP.EA3)
CP901 (Australian)
16
9
12
22
6
20
15
6
6
T850
not supplied
14
4
FK3
11
10
9
22
17
3
FK2
6
21
4
not supplied
23
not supplied
8
FK1
6
2
5
7
1

Ref. No.	Part No.	Description	Remark
1	X-4941-421-1	PANEL ASSY, FRONT (EXCEPT IT)	
1	X-4941-422-1	PANEL ASSY, FRONT (IT)	
2	* A-4341-945-A	PANEL (A) BOARD, COMPLETE	
3	* 1-638-523-11	PANEL (B) BOARD	
4	7-621-773-93	SCREW (PANEL 2.6 TP2)	
5	* 4-924-520-01	CHASSIS	
6	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
7	4-931-169-01	FOOT	
8	* A-4341-948-A	MAIN BOARD, COMPLETE (EXCEPT GERMANY)	
8	* A-4341-949-A	MAIN BOARD, COMPLETE (GERMANY)	
9	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
10	* A-4341-944-A	POWER BOARD, COMPLETE (Australian, EA3)	
10	* A-4341-947-A	POWER BOARD, COMPLETE (GERMANY, AEP, IT)	
10	* A-4341-942-A	POWER BOARD, COMPLETE (UK)	
10	* A-4341-943-A	POWER BOARD, COMPLETE (E2, E3)	
11	7-682-548-04	SCREW +BVTT 3X8 (S)	
12	4-866-342-00	JOINT (B), KNOB	
14	4-921-919-21	BUTTON (P)	
15	* 4-939-802-71	CASE	
16	3-363-099-01	SCREW (CASE +3X8 TP2)	
17	4-943-707-52	PANEL, BACK (Australian)	
17	4-943-707-11	PANEL, BACK (AEP, GERMANY, IT)	
17	4-943-707-42	PANEL, BACK (EA3)	
17	4-943-707-21	PANEL, BACK (UK)	
17	4-943-707-32	PANEL, BACK (E2, E3)	
18	* 3-703-244-00	BUSHING (2104), CORD (EXCEPT E2, E3)	
18	* 3-703-571-11	BUSHING (S) (4516), CORD (E2, E3)	
19	⚠· 1-575-669-21	CORD, POWER (UK)	
19	⚠· 1-690-056-11	CORD, POWER (Australian)	
19	⚠· 1-575-654-11	CORD, POWER (AEP, GERMANY, IT, EA3)	
19	⚠· 1-575-656-11	CORD, POWER (E2, E3)	
20	* 2-379-614-01	HOOK	
21	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
22	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S	
23	9-911-843-XX	CUSHION	
CP901	⚠· 1-526-751-00	OUTLET, AC (UK)	
CP901	⚠· 1-526-794-11	OUTLET, AC (AEP, IT, GERMANY, EA3)	
CP901	⚠· 1-540-196-11	OUTLET, AC (Australian)	
FK1	1-575-784-11	WIRE, FLAT TYPE (13 CORE)	
FK2	1-575-784-11	WIRE, FLAT TYPE (13 CORE)	
FK3	* 1-575-853-11	WIRE, FLAT TYPE (15 CORE)	
T850	⚠· 1-450-119-11	TRANSFORMER, POWER (AEP, IT, GERMANY)	
T850	⚠· 1-450-117-11	TRANSFORMER, POWER (UK)	
T850	⚠· 1-450-118-11	TRANSFORMER, POWER (E2/3, EA3, Australian)	

PANEL (A) **MAIN**
POWER **PANEL (B)**

SECTION 4
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- CAPACITORS
  uF: μF
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: μH
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD....

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- IT: Italian model
- EA3: Saudi Arabia model

Ref. No.	Part No.	Description				Remark
	* A-4341-945-A	PANEL (A) BOARD, COMPLETE				
		*************************				
	* A-4341-948-A	MAIN BOARD, COMPLETE (EXCEPT GERMANY)				
	* A-4341-949-A	MAIN BOARD, COMPLETE (GERMANY)				
		*************************************				
	* A-4341-944-A	POWER BOARD, COMPLETE(Australian, EA3)				
	* A-4341-947-A	POWER BOARD, COMPLETE(GERMANY, AEP, IT)				
	* A-4341-942-A	POWER BOARD, COMPLETE(UK)				
	* A-4341-943-A	POWER BOARD, COMPLETE(E2, E3)				
		*************************************				
	* 1-638-523-11	PANEL (B) BOARD				
		***************				
	* 1-533-213-31	HOLDER, FUSE (AEP, GERMANY, IT, UK)				
	* 3-309-144-21	HEAT SINK				
	* 4-933-621-01	HOLDER (EQ), FL				
	7-682-548-04	SCREW +BVTT 3X8 (S)				
		< BASE POST >				
BP801	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P (AEP, UK, IT, GERMANY)				
		< CAPACITOR >				
C101	1-126-163-11	ELECT	4.7uF	20%	50V	
C102	1-162-215-31	CERAMIC	47PF	5%	50V	
C103	1-124-910-11	ELECT	47uF	20%	50V	
C104	1-126-301-11	ELECT	1uF	20%	50V	
C105	1-126-301-11	ELECT	1uF	20%	50V	
C106	1-126-163-11	ELECT	4.7uF	20%	50V	
C107	1-124-910-11	ELECT	47uF	20%	50V	
C108	1-124-910-11	ELECT	47uF	20%	50V	
C109	1-162-286-31	CERAMIC	220PF	10%	50V	(GERMANY)
C151	1-126-163-11	ELECT	4.7uF	20%	50V	
C152	1-162-215-31	CERAMIC	47PF	5%	50V	
C153	1-124-910-11	ELECT	47uF	20%	50V	
C154	1-126-301-11	ELECT	1uF	20%	50V	
C155	1-126-301-11	ELECT	1uF	20%	50V	
C156	1-126-163-11	ELECT	4.7uF	20%	50V	
C159	1-162-286-31	CERAMIC	220PF	10%	50V	(GERMANY)
C201	1-136-162-00	FILM	0.056uF	5%	50V	
C202	1-162-215-31	CERAMIC	47PF	5%	50V	
C203	1-124-997-11	ELECT	470uF	20%	10V	
C204	1-126-163-11	ELECT	4.7uF	20%	50V	
C205	1-130-480-00	MYLAR	0.0056uF	5%	50V	
C206	1-136-165-00	FILM	0.1uF	5%	50V	
C207	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C208	1-136-165-00	FILM	0.1uF	5%	50V	
C209	1-124-910-11	ELECT	47uF	20%	50V	
C210	1-136-172-00	FILM	0.39uF	5%	50V	
C211	1-136-172-00	FILM	0.39uF	5%	50V	
C212	1-136-165-00	FILM	0.1uF	5%	50V	
C213	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C214	1-124-994-11	ELECT	100uF	20%	10V	
C215	1-136-165-00	FILM	0.1uF	5%	50V	
C216	1-126-163-11	ELECT	4.7uF	20%	50V	
C217	1-126-301-11	ELECT	1uF	20%	50V	
C218	1-126-301-11	ELECT	1uF	20%	50V	
C219	1-130-479-00	MYLAR	0.0047uF	5%	50V	
C220	1-126-163-11	ELECT	4.7uF	20%	50V	
C221	1-162-215-31	CERAMIC	47PF	5%	50V	
C222	1-162-215-31	CERAMIC	47PF	5%	50V	
C223	1-136-159-00	FILM	0.033uF	5%	50V	
C224	1-162-215-31	CERAMIC	47PF	5%	50V	
C225	1-136-162-00	FILM	0.056uF	5%	50V	
C226	1-126-059-11	ELECT	10uF	20%	50V	
C301	1-136-162-00	FILM	0.056uF	5%	50V	
C302	1-136-159-00	FILM	0.033uF	5%	50V	
C303	1-136-157-00	FILM	0.022uF	5%	50V	

PANEL (A) **MAIN** **POWER** **PANEL (B)**

Ref. No.	Part No.	Description			Remark
C304	1-136-155-00	FILM	0.015uF	5%	50V
C305	1-130-482-00	MYLAR	0.0082uF	5%	50V
C306	1-130-480-00	MYLAR	0.0056uF	5%	50V
C307	1-130-477-00	MYLAR	0.0033uF	5%	50V
C308	1-130-475-00	MYLAR	0.0022uF	5%	50V
C309	1-130-473-00	MYLAR	0.0015uF	5%	50V
C310	1-130-470-00	MYLAR	820PF	5%	50V
C311	1-124-910-11	ELECT	47uF	20%	50V
C312	1-124-910-11	ELECT	47uF	20%	50V
C313	1-162-286-31	CERAMIC	220PF	10%	50V
C314	1-136-164-00	FILM	0.082uF	5%	50V
C315	1-124-250-00	ELECT	0.15uF	20%	50V
C316	1-136-169-00	FILM	0.22uF	5%	50V
C317	1-124-252-00	ELECT	0.33uF	20%	50V
C318	1-126-059-11	ELECT	10uF	20%	50V
C319	1-126-163-11	ELECT	4.7uF	20%	50V
C320	1-126-163-11	ELECT	4.7uF	20%	50V
C351	1-136-162-00	FILM	0.056uF	5%	50V
C352	1-136-159-00	FILM	0.033uF	5%	50V
C353	1-136-157-00	FILM	0.022uF	5%	50V
C354	1-136-155-00	FILM	0.015uF	5%	50V
C355	1-130-482-00	MYLAR	0.0082uF	5%	50V
C356	1-130-480-00	MYLAR	0.0056uF	5%	50V
C357	1-130-477-00	MYLAR	0.0033uF	5%	50V
C358	1-130-475-00	MYLAR	0.0022uF	5%	50V
C359	1-130-473-00	MYLAR	0.0015uF	5%	50V
C360	1-130-470-00	MYLAR	820PF	5%	50V
C361	1-124-910-11	ELECT	47uF	20%	50V
C362	1-124-910-11	ELECT	47uF	20%	50V
C363	1-162-286-31	CERAMIC	220PF	10%	50V
C364	1-136-164-00	FILM	0.082uF	5%	50V
C365	1-124-250-00	ELECT	0.15uF	20%	50V
C366	1-136-169-00	FILM	0.22uF	5%	50V
C367	1-124-252-00	ELECT	0.33uF	20%	50V
C368	1-126-059-11	ELECT	10uF	20%	50V
C369	1-126-163-11	ELECT	4.7uF	20%	50V
C401	1-162-215-31	CERAMIC	47PF	5%	50V
C402	1-126-163-11	ELECT	4.7uF	20%	50V
C403	1-126-163-11	ELECT	4.7uF	20%	50V
C404	1-124-910-11	ELECT	47uF	20%	50V
C405	1-124-910-11	ELECT	47uF	20%	50V
C406	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C407	1-124-638-11	ELECT	22uF	20%	10V
C408	1-124-638-11	ELECT	22uF	20%	10V
C409	1-161-494-00	CERAMIC	0.022uF		25V
C410	1-126-163-11	ELECT	4.7uF	20%	50V
C411	1-130-471-00	MYLAR	0.001uF	5%	50V
C412	1-126-163-11	ELECT	4.7uF	20%	50V
C451	1-162-215-31	CERAMIC	47PF	5%	50V
C452	1-126-163-11	ELECT	4.7uF	20%	50V
C453	1-126-163-11	ELECT	4.7uF	20%	50V
C456	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C457	1-124-638-11	ELECT	22uF	20%	10V
C458	1-126-163-11	ELECT	4.7uF	20%	50V
C458	1-124-638-11	ELECT	22uF	20%	10V
C459	1-161-494-00	CERAMIC	0.022uF		25V
C460	1-126-163-11	ELECT	4.7uF	20%	50V
C461	1-130-471-00	MYLAR	0.001uF	5%	50V
C462	1-126-163-11	ELECT	4.7uF	20%	50V
C501	1-136-159-00	FILM	0.033uF	5%	50V
C502	1-161-494-00	CERAMIC	0.022uF		25V
C503	1-161-494-00	CERAMIC	0.022uF		25V
C504	1-136-165-00	FILM	0.1uF	5%	50V
C510	1-126-300-11	ELECT	0.47uF	20%	50V
C850	1-164-096-11	CERAMIC	0.01uF		50V
C851	1-164-096-11	CERAMIC	0.01uF		50V
C852	1-106-367-00	MYLAR	0.01uF	5%	200V
C853	1-126-376-11	ELECT	470uF	20%	25V
C854	1-126-376-11	ELECT	470uF	20%	25V
C855	1-124-910-11	ELECT	47uF	20%	50V
C856	1-124-910-11	ELECT	47uF	20%	50V
C857	1-124-911-11	ELECT	220uF	20%	50V
C858	1-124-910-11	ELECT	47uF	20%	50V
C859	1-124-910-11	ELECT	47uF	20%	50V
C860 ⚠	1-161-744-00	CERAMIC	0.01uF		400V
C901	1-124-910-11	ELECT	47uF	20%	50V
C902	1-124-910-11	ELECT	47uF	20%	50V
C903	1-124-997-11	ELECT	470uF	20%	10V
C904	1-124-997-11	ELECT	470uF	20%	10V
C905	1-161-494-00	CERAMIC	0.022uF		25V
C906	1-126-301-11	ELECT	1uF	20%	50V
C907	1-136-165-00	FILM	0.1uF	5%	50V
C908	1-126-059-11	ELECT	10uF	20%	50V
C909	1-161-494-00	CERAMIC	0.022uF		25V
C910	1-125-486-11	DUBLE LAYERS	0.22F		5.5V
C911	1-161-494-00	CERAMIC	0.022uF		25V

< CONNECTOR >

Ref. No.	Part No.	Description
CNJ101	1-565-258-11	JACK, PIN 4P
CNJ102 *	1-568-832-11	SOCKET, CONNECTOR 13P
CNJ103 *	1-568-832-11	SOCKET, CONNECTOR 13P
CNJ104 *	1-568-834-11	SOCKET, CONNECTOR 15P
CNJ401 *	1-568-832-11	SOCKET, CONNECTOR 13P
CNJ402 *	1-568-832-11	SOCKET, CONNECTOR 13P
CNJ403 *	1-568-834-11	SOCKET, CONNECTOR 15P

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

PANEL (A) MAIN POWER PANEL (B)

Ref. No.	Part No.	Description	Remark
CNP853 *	1-564-321-00	PIN, CONNECTOR 2P	
CNP860 *	1-564-337-61	PIN, CONNECTOR 3P	
CNP861 *	1-564-336-00	PIN, CONNECTOR 2P	
CNP862 *	1-564-337-00	PIN, CONNECTOR 3P	
CNP902 *	1-565-561-11	PIN, CONNECTOR 3P	
		< OUTLET >	
CP901	1-526-751-00	OUTLET, AC (UK)	
CP901	1-526-794-11	OUTLET, AC (NONPOLAR) (1P) (AEP, IT, GERMANY, EA3)	
CP901	1-540-038-11	OUTLET, AC (NONPOLAR) (1P) (E2, E3)	
CP901	1-540-196-11	OUTLET, AC (Australian)	
		< DIODE >	
D201	8-719-200-82	DIODE 11ES2	
D202	8-719-912-20	DIODE 1SS120	
D203	8-719-912-20	DIODE 1SS120	
D204	8-719-912-20	DIODE 1SS120	
D301	8-719-912-20	DIODE 1SS120	
D302	8-719-933-33	DIODE HZS6A1L	
D351	8-719-912-20	DIODE 1SS120	
D401	8-719-912-20	DIODE 1SS120	
D402	8-719-912-20	DIODE 1SS120	
D451	8-719-912-20	DIODE 1SS120	
D452	8-719-912-20	DIODE 1SS120	
D501	8-719-912-20	DIODE 1SS120	
D502	8-719-912-20	DIODE 1SS120	
D503	8-719-912-20	DIODE 1SS120	
D504	8-719-912-20	DIODE 1SS120	
D505	8-719-912-20	DIODE 1SS120	
D506	8-719-912-20	DIODE 1S120	
D507	8-719-912-20	DIODE 1SS120	
D508	8-719-912-20	DIODE 1SS120	
D509	8-719-301-37	DIODE SEL2210S-CD	
D510	8-719-301-37	DIODE SEL2210S-CD	
D511	8-719-301-37	DIODE SEL2210S-CD	
D512	8-719-301-37	DIODE SEL2210S-CD	
D513	8-719-301-37	DIODE SEL2210S-CD	
D514	8-719-301-37	DIODE SEL2210S-CD	
D515	8-719-301-37	DIODE SEL2210S-CD	
D516	8-719-301-37	DIODE SEL2210S-CD	
D517	8-719-301-37	DIODE SEL2210S-CD	
D518	8-719-301-37	DIODE SEL2210S-CD	
D519	8-719-301-37	DIODE SEL2210S-CD	
D520	8-719-301-37	DIODE SEL2210S-CD	
D521	8-719-301-37	DIODE SEL2210S-CD	
D522	8-719-301-37	DIODE SEL2210S-CD	
D523	8-719-301-37	DIODE SEL2210S-CD	
D850	8-719-200-82	DIODE 11ES2	
D851	8-719-200-82	DIODE 11ES2	
D852	8-719-200-82	DIODE 11ES2	
D853	8-719-200-82	DIODE 11ES2	
D854	8-719-200-82	DIODE 11ES2	
D855	8-719-934-22	DIODE HZS30-2L	
D856	8-719-014-88	DIODE UZP-6.8BC	
D901	8-719-933-36	DIODE HZS6B1L	
D902	8-719-933-36	DIODE HZS6B1L	
D903	8-719-912-20	DIODE 1SS120	
D904	8-719-912-20	DIODE 1SS120	
D905	8-719-000-84	DIODE UZL-7M1	
D906	8-719-912-20	DIODE 1SS120	
		< FUSE >	
F850 ⚠·	1-532-078-00	FUSE (T1A) (AEP, UK, IT, GERMANY)	
		< CABLE >	
FK1	1-575-784-11	WIRE, FLAT TYPE (13 CORE)	
FK2	1-575-784-11	WIRE, FLAT TYPE (13 CORE)	
FK3 *	1-575-853-11	WIRE, FLAT TYPE (15 CORE)	
		< FILTER >	
FL401	1-519-559-11	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC101	8-759-634-51	IC M5218AP	
IC102	8-759-634-51	IC M5218AP	
IC201	8-759-801-01	IC LC4066	
IC202	8-759-634-51	IC M5218AP	
IC203	8-759-231-53	IC TA7805S	
IC204	8-759-633-83	IC M50198P	
IC205	8-759-634-51	IC M5218AP	
IC206	8-759-801-01	IC LC4066	
IC301	8-759-822-25	IC LC7520K	
IC302	8-759-633-78	IC M5289P	
IC303	8-759-633-78	IC M5289P	
IC401	8-759-634-51	IC M5218AP	
IC402	8-759-822-27	IC LC7565K	
IC403	8-759-991-11	IC XR1091DCP	
IC452	8-759-822-27	IC LC7565K	
IC453	8-759-991-11	IC XR1091DCP	
IC501	8-759-149-01	IC uPD75108CW-B10	
IC850	8-759-231-56	IC TA7809S	
IC851	8-759-245-82	IC TA7909S	
IC901	8-759-820-13	IC L78MR06	
ICB401	1-233-198-11	IC COMPOSITION CIRCUIT BLOCK 100kX12	
ICB402	1-233-198-11	IC COMPOSITION CIRCUIT BLOCK 100kX12	
ICB451	1-233-198-11	IC COMPOSITION CIRCUIT BLOCK 100kX12	
ICB452	1-233-198-11	IC COMPOSITION CIRCUIT BLOCK 100kX12	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		< COIL >	
L201	1-410-521-11	INDUCTOR 100uH	
		< TRANSISTOR >	
Q101	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q102	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q151	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q152	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q201	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q202	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q203	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q204	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q205	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q206	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q207	8-729-900-80	TRANSISTOR DTC114ES	
Q208	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q209	8-729-900-80	TRANSISTOR DTC114ES	
Q210	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q211	8-729-900-80	TRANSISTOR DTC114ES	
Q212	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q213	8-729-900-80	TRANSISTOR DTC114ES	
Q214	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q215	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q216	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q301	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q351	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q401	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q402	8-729-900-80	TRANSISTOR DTC114ES	
Q403	8-729-900-80	TRANSISTOR DTC114ES	
Q404	8-729-900-61	TRANSISTOR DTA114ES	
Q451	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q452	8-729-900-61	TRANSISTOR DTA114ES	
Q501	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q850	8-729-111-67	TRANSISTOR 2SB1094-L	
		< RESISTOR >	
R101	1-249-413-11	CARBON 470 5% 1/4W	
R102	1-249-437-11	CARBON 47K 5% 1/4W	
R103	1-249-437-11	CARBON 47K 5% 1/4W	
R104	1-249-429-11	CARBON 10K 5% 1/4W	
R105	1-249-429-11	CARBON 10K 5% 1/4W	
R106	1-249-425-11	CARBON 4.7K 5% 1/4W	
R107	1-249-428-11	CARBON 8.2K 5% 1/4W	
R108	1-249-441-11	CARBON 100K 5% 1/4W	
R109	1-249-433-11	CARBON 22K 5% 1/4W	
R110	1-249-430-11	CARBON 12K 5% 1/4W	
R111	1-249-429-11	CARBON 10K 5% 1/4W	
R112	1-249-424-11	CARBON 3.9K 5% 1/4W	
R113	1-249-432-11	CARBON 18K 5% 1/4W	
R151	1-249-413-11	CARBON 470 5% 1/4W	
R152	1-249-437-11	CARBON 47K 5% 1/4W	
R153	1-249-437-11	CARBON 47K 5% 1/4W	
R154	1-249-429-11	CARBON 10K 5% 1/4W	
R155	1-249-429-11	CARBON 10K 5% 1/4W	
R156	1-249-425-11	CARBON 4.7K 5% 1/4W	
R157	1-249-428-11	CARBON 8.2K 5% 1/4W	
R158	1-249-441-11	CARBON 100K 5% 1/4W	
R159	1-249-433-11	CARBON 22K 5% 1/4W	
R160	1-249-430-11	CARBON 12K 5% 1/4W	
R161	1-249-429-11	CARBON 10K 5% 1/4W	
R162	1-249-424-11	CARBON 3.9K 5% 1/4W	
R163	1-249-432-11	CARBON 18K 5% 1/4W	
R201	1-249-429-11	CARBON 10K 5% 1/4W	
R202	1-249-429-11	CARBON 10K 5% 1/4W	
R203	1-249-429-11	CARBON 10K 5% 1/4W	
R204	1-249-429-11	CARBON 10K 5% 1/4W	
R205	1-249-426-11	CARBON 5.6K 5% 1/4W	
R206	1-249-431-11	CARBON 15K 5% 1/4W	
R207	1-249-429-11	CARBON 10K 5% 1/4W	
R208	1-249-431-11	CARBON 15K 5% 1/4W	
R209	1-249-431-11	CARBON 15K 5% 1/4W	
R210	1-249-429-11	CARBON 10K 5% 1/4W	
R211	1-249-431-11	CARBON 15K 5% 1/4W	
R212	1-247-903-00	CARBON 1M 5% 1/4W	
R213	1-249-426-11	CARBON 5.6K 5% 1/4W	
R214	1-249-429-11	CARBON 10K 5% 1/4W	
R215	1-249-426-11	CARBON 5.6K 5% 1/4W	
R216	1-249-429-11	CARBON 10K 5% 1/4W	
R217	1-249-420-11	CARBON 1.8K 5% 1/4W	
R218	1-249-429-11	CARBON 10K 5% 1/4W	
R219	1-249-435-11	CARBON 33K 5% 1/4W	
R220	1-249-435-11	CARBON 33K 5% 1/4W	
R221	1-249-425-11	CARBON 4.7K 5% 1/4W	
R222	1-249-435-11	CARBON 33K 5% 1/4W	
R223	1-249-435-11	CARBON 33K 5% 1/4W	
R224	1-249-425-11	CARBON 4.7K 5% 1/4W	
R225	1-249-435-11	CARBON 33K 5% 1/4W	
R226	1-249-435-11	CARBON 33K 5% 1/4W	
R227	1-249-425-11	CARBON 4.7K 5% 1/4W	
R228	1-249-441-11	CARBON 100K 5% 1/4W	
R229	1-249-417-11	CARBON 1K 5% 1/4W	
R230	1-249-437-11	CARBON 47K 5% 1/4W	
R231	1-249-437-11	CARBON 47K 5% 1/4W	
R232	1-249-429-11	CARBON 10K 5% 1/4W	
R233	1-249-429-11	CARBON 10K 5% 1/4W	

PANEL (A) MAIN POWER PANEL (B)

Ref. No.	Part No.	Description			Remark
R234	1-249-429-11	CARBON	10K	5%	1/4W
R235	1-249-429-11	CARBON	10K	5%	1/4W
R236	1-249-429-11	CARBON	10K	5%	1/4W
R237	1-249-429-11	CARBON	10K	5%	1/4W
R238	1-249-429-11	CARBON	10K	5%	1/4W
R239	1-249-433-11	CARBON	22K	5%	1/4W
R240	1-249-437-11	CARBON	47K	5%	1/4W
R241	1-249-437-11	CARBON	47K	5%	1/4W
R242	1-249-425-11	CARBON	4.7K	5%	1/4W
R243	1-249-435-11	CARBON	33K	5%	1/4W
R244	1-249-435-11	CARBON	33K	5%	1/4W
R245	1-249-425-11	CARBON	4.7K	5%	1/4W
R246	1-249-425-11	CARBON	4.7K	5%	1/4W
R247	1-249-435-11	CARBON	33K	5%	1/4W
R248	1-249-435-11	CARBON	33K	5%	1/4W
R249	1-249-417-11	CARBON	1K	5%	1/4W
R250	1-249-429-11	CARBON	10K	5%	1/4W
R251	1-249-429-11	CARBON	10K	5%	1/4W
R252	1-249-433-11	CARBON	22K	5%	1/4W
R253	1-249-433-11	CARBON	22K	5%	1/4W
R254	1-249-433-11	CARBON	22K	5%	1/4W
R255	1-249-433-11	CARBON	22K	5%	1/4W
R256	1-249-426-11	CARBON	5.6K	5%	1/4W
R257	1-249-425-11	CARBON	4.7K	5%	1/4W
R301	1-247-903-00	CARBON	1M	5%	1/4W
R302	1-247-903-00	CARBON	1M	5%	1/4W
R303	1-247-903-00	CARBON	1M	5%	1/4W
R304	1-247-903-00	CARBON	1M	5%	1/4W
R305	1-247-903-00	CARBON	1M	5%	1/4W
R306	1-247-903-00	CARBON	1M	5%	1/4W
R307	1-247-903-00	CARBON	1M	5%	1/4W
R308	1-247-903-00	CARBON	1M	5%	1/4W
R309	1-247-903-00	CARBON	1M	5%	1/4W
R310	1-247-903-00	CARBON	1M	5%	1/4W
R311	1-247-903-00	CARBON	1M	5%	1/4W
R312	1-247-903-00	CARBON	1M	5%	1/4W
R313	1-247-903-00	CARBON	1M	5%	1/4W
R314	1-247-903-00	CARBON	1M	5%	1/4W
R315	1-249-431-11	CARBON	15K	5%	1/4W
R316	1-249-416-11	CARBON	820	5%	1/4W
R317	1-247-881-00	CARBON	120K	5%	1/4W
R318	1-249-429-11	CARBON	10K	5%	1/4W
R319	1-249-417-11	CARBON	1K	5%	1/4W
R320	1-249-435-11	CARBON	33K	5%	1/4W
R321	1-249-419-11	CARBON	1.5K	5%	1/4W
R322	1-249-425-11	CARBON	4.7K	5%	1/4W
R351	1-247-903-00	CARBON	1M	5%	1/4W
R352	1-247-903-00	CARBON	1M	5%	1/4W
R353	1-247-903-00	CARBON	1M	5%	1/4W
R354	1-247-903-00	CARBON	1M	5%	1/4W
R355	1-247-903-00	CARBON	1M	5%	1/4W
R356	1-247-903-00	CARBON	1M	5%	1/4W
R357	1-247-903-00	CARBON	1M	5%	1/4W
R358	1-247-903-00	CARBON	1M	5%	1/4W
R359	1-247-903-00	CARBON	1M	5%	1/4W
R360	1-247-903-00	CARBON	1M	5%	1/4W
R361	1-247-903-00	CARBON	1M	5%	1/4W
R362	1-247-903-00	CARBON	1M	5%	1/4W
R363	1-247-903-00	CARBON	1M	5%	1/4W
R364	1-247-903-00	CARBON	1M	5%	1/4W
R365	1-249-431-11	CARBON	15K	5%	1/4W
R366	1-249-416-11	CARBON	820	5%	1/4W
R367	1-247-881-00	CARBON	120K	5%	1/4W
R368	1-249-429-11	CARBON	10K	5%	1/4W
R369	1-249-417-11	CARBON	1K	5%	1/4W
R370	1-249-435-11	CARBON	33K	5%	1/4W
R401	1-249-433-11	CARBON	22K	5%	1/4W
R402	1-249-413-11	CARBON	470	5%	1/4W
R403	1-249-431-11	CARBON	15K	5%	1/4W
R404	1-249-429-11	CARBON	10K	5%	1/4W
R405	1-247-885-00	CARBON	180K	5%	1/4W
R406	1-249-421-11	CARBON	2.2K	5%	1/4W
R407	1-249-426-11	CARBON	5.6K	5%	1/4W
R408	1-249-429-11	CARBON	10K	5%	1/4W
R409	1-249-432-11	CARBON	18K	5%	1/4W
R410	1-247-881-00	CARBON	120K	5%	1/4W
R411	1-247-881-00	CARBON	120K	5%	1/4W
R412	1-249-441-11	CARBON	100K	5%	1/4W
R413	1-249-419-11	CARBON	1.5K	5%	1/4W
R451	1-249-433-11	CARBON	22K	5%	1/4W
R452	1-249-413-11	CARBON	470	5%	1/4W
R453	1-249-431-11	CARBON	15K	5%	1/4W
R454	1-249-429-11	CARBON	10K	5%	1/4W
R455	1-247-885-00	CARBON	180K	5%	1/4W
R456	1-249-421-11	CARBON	2.2K	5%	1/4W
R457	1-249-426-11	CARBON	5.6K	5%	1/4W
R458	1-249-429-11	CARBON	10K	5%	1/4W
R459	1-249-432-11	CARBON	18K	5%	1/4W
R460	1-247-881-00	CARBON	120K	5%	1/4W
R461	1-247-881-00	CARBON	120K	5%	1/4W
R462	1-249-441-11	CARBON	100K	5%	1/4W
R463	1-249-419-11	CARBON	1.5K	5%	1/4W
R501	1-249-417-11	CARBON	1K	5%	1/4W
R502	1-249-437-11	CARBON	47K	5%	1/4W
R503	1-249-417-11	CARBON	1K	5%	1/4W

PANEL (A) MAIN POWER PANEL (B)

Ref. No.	Part No.	Description			Remark	
R504	1-249-437-11	CARBON	47K	5%	1/4W	
R505	1-249-417-11	CARBON	1K	5%	1/4W	
R506	1-249-437-11	CARBON	47K	5%	1/4W	
R507	1-249-417-11	CARBON	1K	5%	1/4W	
R508	1-249-437-11	CARBON	47K	5%	1/4W	
R509	1-247-887-00	CARBON	220K	5%	1/4W	
R510	1-249-429-11	CARBON	10K	5%	1/4W	
R511	1-249-410-11	CARBON	270	5%	1/4W	
R512	1-249-410-11	CARBON	270	5%	1/4W	
R513	1-249-414-11	CARBON	560	5%	1/4W	
R514	1-249-414-11	CARBON	560	5%	1/4W	
R515	1-249-414-11	CARBON	560	5%	1/4W	
R516	1-249-414-11	CARBON	560	5%	1/4W	
R517	1-249-414-11	CARBON	560	5%	1/4W	
R518	1-249-414-11	CARBON	560	5%	1/4W	
R519	1-249-414-11	CARBON	560	5%	1/4W	
R520	1-249-414-11	CARBON	560	5%	1/4W	
R521	1-249-414-11	CARBON	560	5%	1/4W	
R522	1-249-414-11	CARBON	560	5%	1/4W	
R523	1-249-410-11	CARBON	270	5%	1/4W	
R524	1-249-417-11	CARBON	1K	5%	1/4W	
R525	1-249-417-11	CARBON	1K	5%	1/4W	
R526	1-249-417-11	CARBON	1K	5%	1/4W	
R527	1-249-441-11	CARBON	100K	5%	1/4W	
R528	1-249-441-11	CARBON	100K	5%	1/4W	
R529	1-249-441-11	CARBON	100K	5%	1/4W	
R564	1-249-414-11	CARBON	560	5%	1/4W	
R565	1-249-414-11	CARBON	560	5%	1/4W	
R853	1-249-429-11	CARBON	10K	5%	1/4W	
R854	1-249-419-11	CARBON	1.5K	5%	1/4W	
R901 ⚠	1-212-859-00	FUSIBLE	12	5%	1/4W	F
R902 ⚠	1-212-879-11	FUSIBLE	82	5%	1/4W	F
R903 ⚠	1-212-879-11	FUSIBLE	82	5%	1/4W	F
R904 ⚠	1-212-859-00	FUSIBLE	12	5%	1/4W	F
R905	1-249-417-11	CARBON	1K	5%	1/4W	
R906	1-249-433-11	CARBON	22K	5%	1/4W	
R907	1-249-433-11	CARBON	22K	5%	1/4W	
R908	1-249-393-11	CARBON	10	5%	1/4W	

< SWITCH >

Ref. No.	Part No.	Description	Remark
S501	1-554-303-21	SWITCH, TACTILE (EFFE)	
S502	1-554-303-21	SWITCH, TACTILE (DISP)	
S503	1-554-303-21	SWITCH, TACTILE (SURR)	
S504	1-554-303-21	SWITCH, TACTILE (DEL)	
S505	1-554-303-21	SWITCH, TACTILE (△)	
S506	1-554-303-21	SWITCH, TACTILE (▽)	
S507	1-554-303-21	SWITCH, TACTILE (▷)	
S508	1-554-303-21	SWITCH, TACTILE (◁)	
S509	1-554-303-21	SWITCH, TACTILE (L)	
S510	1-554-303-21	SWITCH, TACTILE (L+R)	
S511	1-554-303-21	SWITCH, TACTILE (R)	
S512	1-554-303-21	SWITCH, TACTILE (DCEQ)	
S513	1-554-303-21	SWITCH, TACTILE (REV)	
S514	1-554-303-21	SWITCH, TACTILE (FLAT)	
S515	1-554-303-21	SWITCH, TACTILE (MEMO)	
S516	1-554-303-21	SWITCH, TACTILE (P.F)	
S517	1-554-303-21	SWITCH, TACTILE (M1)	
S518	1-554-303-21	SWITCH, TACTILE (M2)	
S519	1-554-303-21	SWITCH, TACTILE (M3)	
S520	1-554-303-21	SWITCH, TACTILE (M4)	
S521	1-554-303-21	SWITCH, TACTILE (M5)	
S522	1-554-303-21	SWITCH, TACTILE (M6)	
S523	1-554-303-21	SWITCH, TACTILE (M7)	
S524	1-554-303-21	SWITCH, TACTILE (M8)	
S525	1-554-303-21	SWITCH, TACTILE (M9)	
S526	1-554-303-21	SWITCH, TACTILE (M10)	
S527	1-554-303-21	SWITCH, TACTILE (S.10)	
S850	1-572-716-11	SWITCH, PUSH (AC POWER)	

< TRANSFORMER >

Ref. No.	Part No.	Description	Remark
T8501 ⚠	1-450-117-11	TRANSFORMER, POWER (UK)	
T8501 ⚠	1-450-118-11	TRANSFORMER, POWER (E2/3, EA3, Australian)	
T8501 ⚠	1-450-119-11	TRANSFORMER, POWER (AEP, IT, GERMANY)	

< SWITCH >

Ref. No.	Part No.	Description	Remark
VS850 ⚠	1-572-367-11	SWITCH, VOLTAGE SELECTION (E2, E3, EA3, Australian)	

< CERAMIC >

Ref. No.	Part No.	Description	Remark
X201	1-567-818-21	VIBRATOR, CERAMIC (3.58MHz)	
X501	1-577-359-21	VIBRATOR, CERAMIC (4.19MHz)	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

MISCELLANEOUS

Ref. No.	Part No.	Description	Remark
19 ⚠	1-575-654-11	CORD, POWER (AEP, GERMANY, IT, EA3)	
19 ⚠	1-575-656-11	CORD, POWER (E2, E3)	
19 ⚠	1-575-669-21	CORD, POWER (UK)	
19 ⚠	1-690-056-11	CORD, POWER (Australian)	
CP901	1-526-751-00	OUTLET, AC (UK)	
CP901	1-526-794-11	OUTLET, AC (NONPOLAR) (1P) (AEP, IT, GERMANY, EA3)	
CP901	1-540-196-11	OUTLET, AC (Australian)	

* * *

ACCESSORY & PACKING MATERIAL

Ref. No.	Part No.	Description	Remark
	1-559-533-11	CORD, CONNECTION (AEP, GERMANY, UK, IT)	
	1-590-850-11	CORD, WITH CONNECTOR (AEP, GERMANY, UK, IT)	
	3-753-325-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP)	
	3-753-325-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP, GERMAN, IT)	
	3-753-325-51	MANUAL, INSTRUCTION (ENGLISH) (UK)	
*	4-929-563-01	CUSHION	
*	4-945-487-01	INDIVIDUAL CARTON (AEP, GERMANY, UK, IT)	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Sony Corporation
Audio Group

English
91D0469-1
Printed in Japan

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Published by Customer Relations and Service Group

SS-A705

SERVICE MANUAL

AEP Model
UK Model

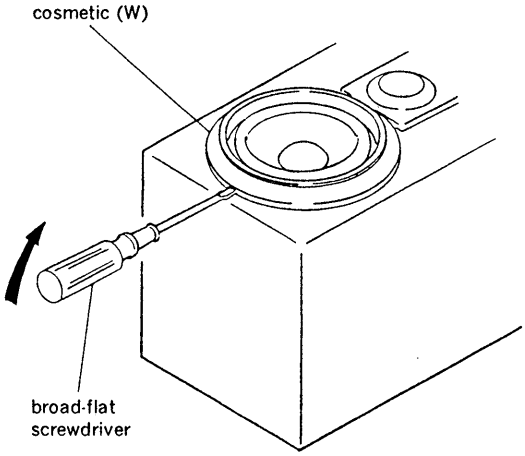
SPECIFICATIONS

Speaker system	3-way
Speaker units	Woofer : 20cm Mid-range: 10cm cone type Tweeter : 2.5cm dome type
Power handling capacity	Maximum input power 130W
Sensitivity	88dB/W/m
Frequency range	40-30,000 Hz
Rated impedance	6 ohms
Dimensions	Approx. 290x540x240mm(w/h/d)
Weight	Approx. 8.5 kg

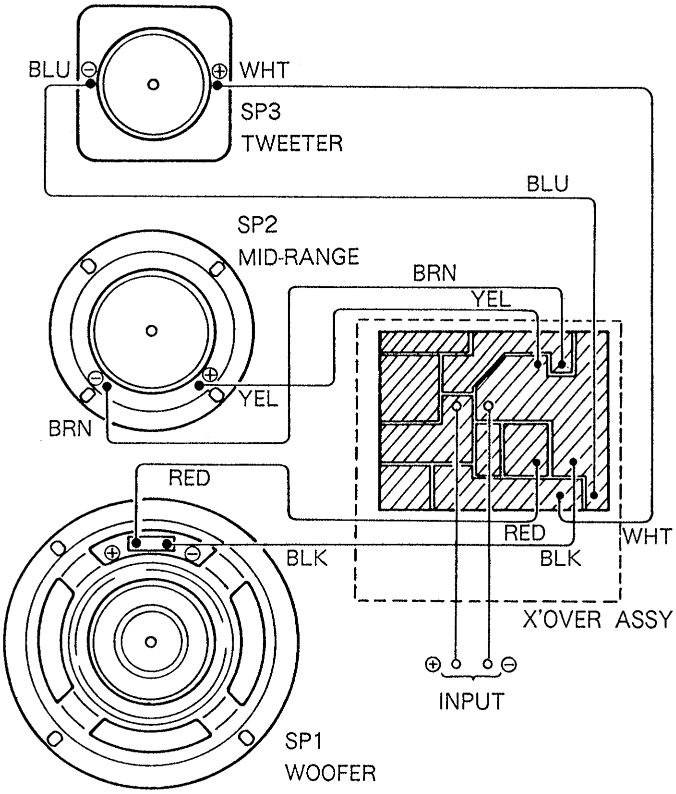
Design and specifications subject to change without notice.

This set is the speaker system in LBT-D705, LBT-D705CD, LBT-D705CDG, and LBT-D705M.

1. COSMETIC (W) REMOVAL


cosmetic (W)
broad-flat screwdriver

2. WIRING DIAGRAM


BLU ⊖
⊕ WHT
SP3
TWEETER
BLU
SP2
MID-RANGE
BRN
YEL
⊖
⊕
YEL
BRN
RED
⊕
⊖
BLK
RED
BLK
WHT
X'OVER ASSY
⊕ ⊖
INPUT
SP1
WOOFER

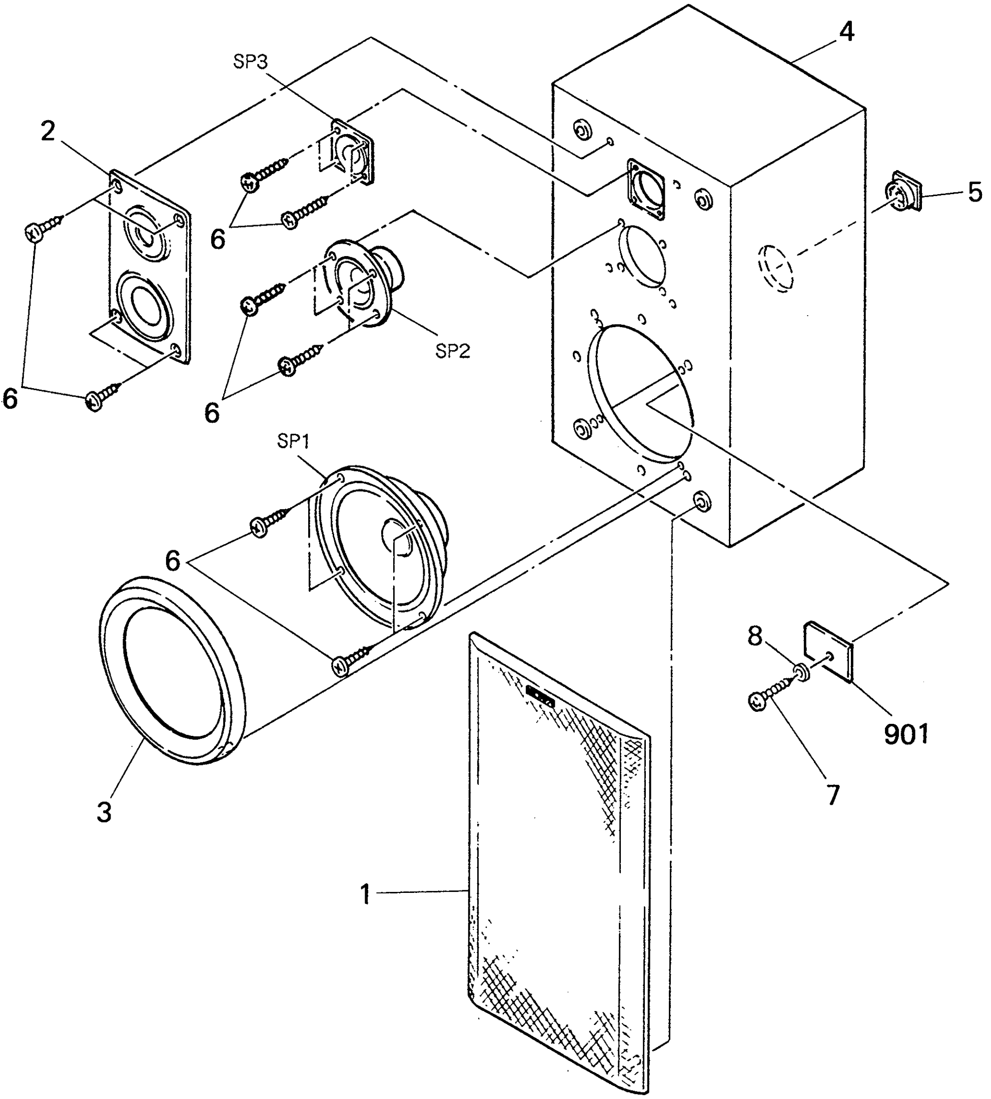
SPEAKER SYSTEM

SONY

3. EXPLODED VIEW AND PARTS LIST

NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



No.	Part No.	Description
1	T-8150-399-A	FRAME ASSY, GRILLE
2	T-8150-443-A	COSMETIC (TW) ASSY
3	T-8151-272-1	COSMETIC (W)
4	T-8150-396-A	SPEAKER BOX ASSY
5	T-8151-042-1	TERMINAL BOARD
6	T-8150-573-1	TAPPING SCREW +P 4X15
7	T-8151-452-1	BRASS WOOD SCREW +P 4X40
8	T-8150-387-1	WASHER HARD PAPER

ELECTRICAL PARTS

No.	Part No.	Description
901	T-8150-444-A	X'OVER ASSY
SP1	T-8110-478-1	WOOFER
SP2	T-8110-475-1	MID-RANGE
SP3	T-8110-477-1	TWEETER

ACCESSORY & PACKING MATERIAL

T-8151-353-1 MANUAL, INSTRUCTION

Sony Corporation
Audio Group

9-956-462-11

English
91E0259-1
Printed in Japan
©1991.5
Published by Customer Relations and Service Group

PS-D705/D705P

SERVICE MANUAL

AEP Model
E Model
PS-D705

E Model
UK Model
PS-D705P

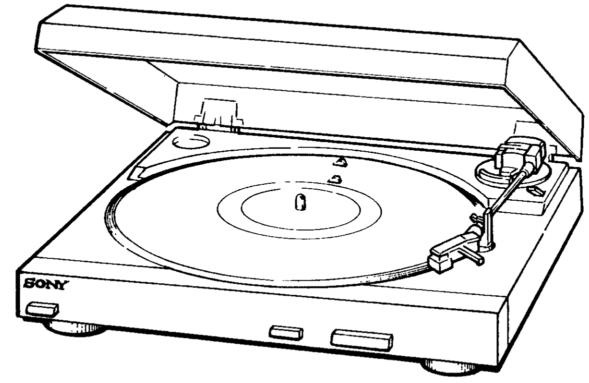


Photo: PS-D705

PS-D705P is the STEREO TURNTABLE SYSTEM in LBT-D505/D505CDM/D705CD/D705CDM

SPECIFICATIONS

Turntable	
Platter	30cm (12 in.)
Motor	DC servo motor
Drive system	Belt drive
Speed	33 ⅓ rpm/45 rpm switchable
Wow and flutter	0.15% (WRMS)
Signal-to-noise ratio	65 dB (DIN-B)
Automatic system	Return, reject, lead in
Tonearm	
Type	Dynamically balanced
Pivot-to-stylus length	206 mm (7 ⅞ in.)
Overall arm length	235 mm (9 ⅜ in.)
Cartridge	
Type	Moving magnet type
Frequency response	20 Hz-20kHz
Stylus	ND-155G
General	
Dimensions	355 × 93.5 × 355 mm(w/h/d) (14 × 3 ¾ × 14 inches)
Weight	Approx. 2.6 kg (4 lb 14 oz)
Power requirements	D705: AEP, Germany, Italian models 220 V AC, 50/60 Hz D705: E, Saudi Arabia models 110 – 120 V, 220 – 240 V adjustable, 50/60 Hz
Power consumption	4 W
Accessory supplied	45-rpm adaptor (1)
Optional accessory	Replacement stylus ND-155G

Design and specificatins subject to change without notice.

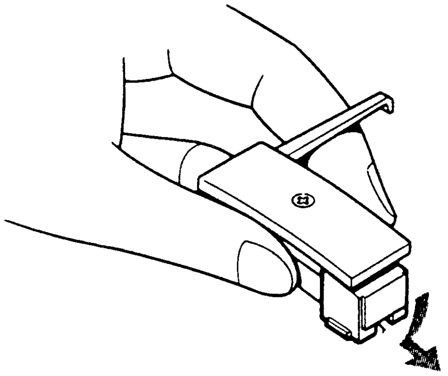
Note
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

Note for Cartridge
Be careful not to use any cartridge except for specified one (Part No.: 4-944-756-01) as balance weight of pick up arm assy is fixed.

REPLACING THE STYLUS

Replace the stylus after about 400 hours of use because using a worn stylus will damage records.
An ND-155G replacement stylus is available at your Sony dealer.
Be sure to turn the amplifier off before proceeding with replacement.

1 While holding the cartridge, detach the stylus assembly as illustrated.
2 Insert the new stylus into the cartridge.



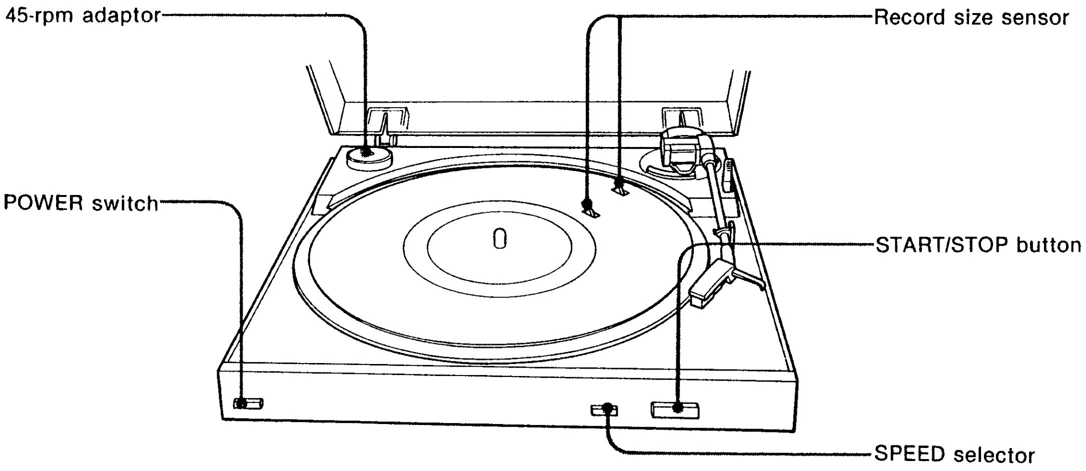
使用時は添付資料も参照のこと
Refer to the additional documents.

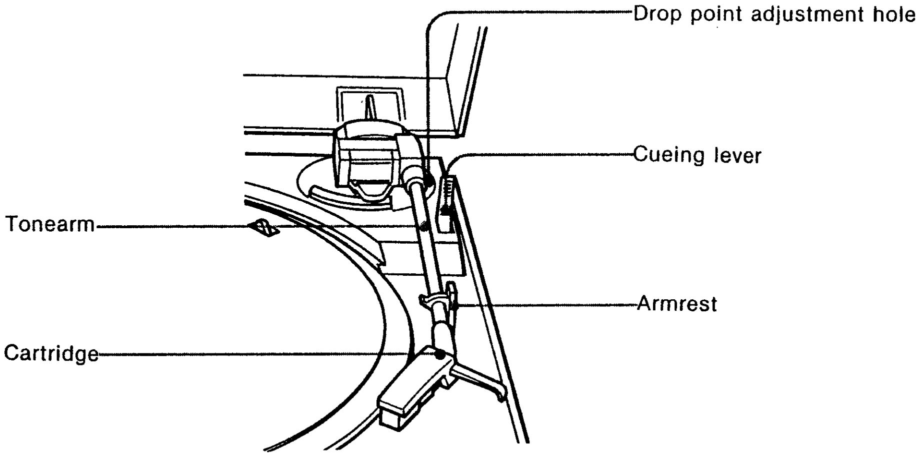
STEREO TURNTABLE SYSTEM

SONY®

SECTION 1
GENERAL

1-1. LOCATION OF CONTROLS

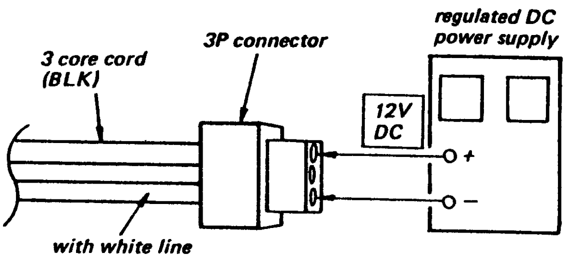

45-rpm adaptor
Record size sensor
POWER switch
START/STOP button
SPEED selector


Drop point adjustment hole
Cueing lever
Tonearm
Armrest
Cartridge

REPAIRING PRECAUTION (PS-D705P only)

[To supply B+ voltage]

The power of this unit is fed from HST-D505 or TA-V705. Because of this, connect the regulated power supply as illustrated right when this unit alone operates.

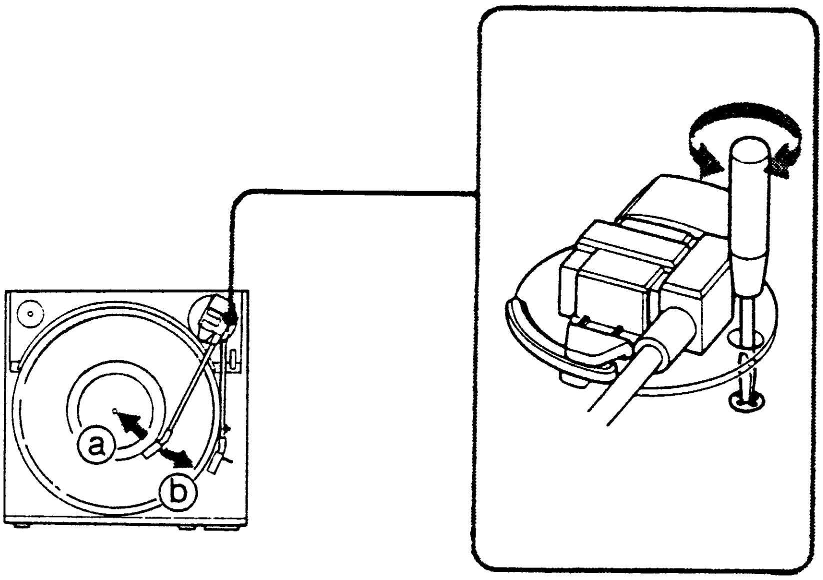

regulated DC power supply
3P connector
3 core cord (BLK)
12V DC
+
–
with white line

1-2. TONEARM DROP-POINT ADJUSTMENT

The tonearm drop-point during auto play has been factory-adjusted. If necessary, readjust it as follows.

To readjust the drop-point inward ⓐ, turn the screw clockwise with a screwdriver.
To readjust the drop-point outward ⓑ, turn the screw counterclockwise.

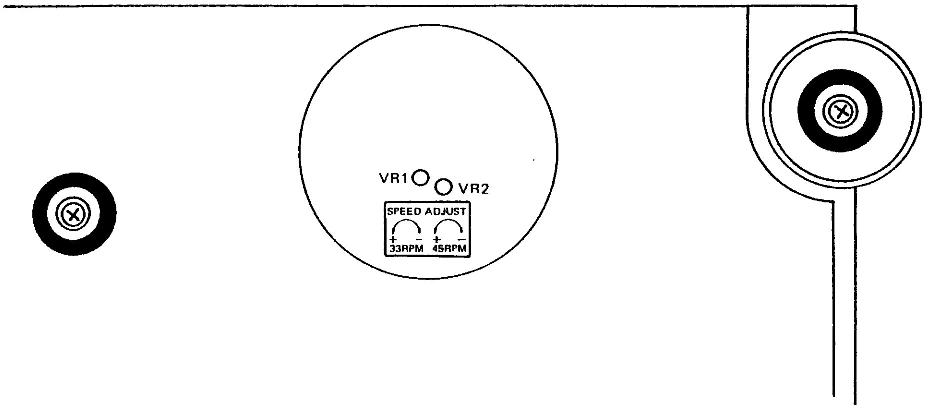
If the tonearm does not return to the arm rest automatically after play
Turn the adjustment screw counterclockwise.



1-3. Speed Adjustment

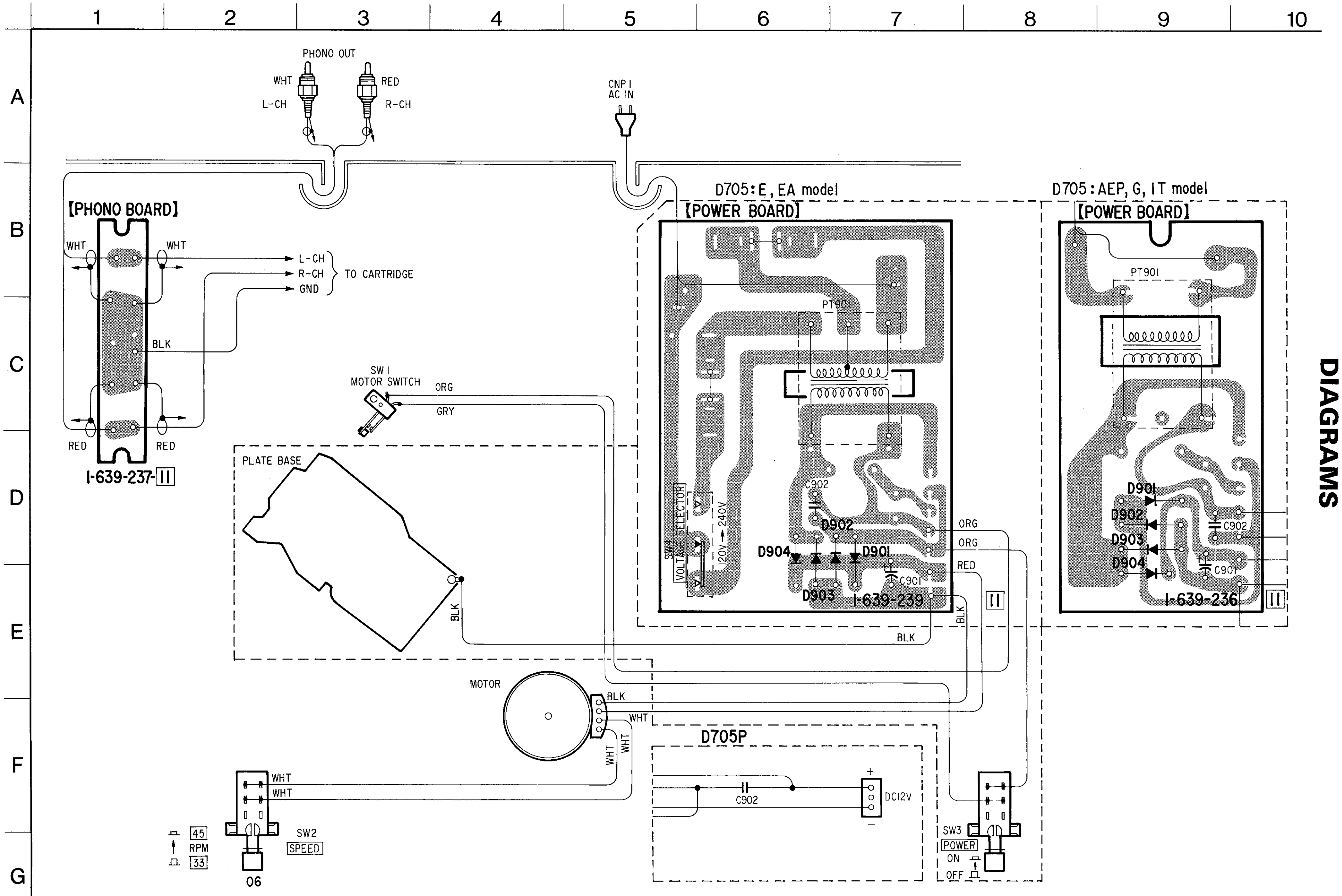
Note: Be sure to perform 45rpm adjustment before 33 rpm.

1. Place a stroboscope board on the turntable sheet.
2. Set the SPEED switch to 45.
   Press the START button.
   Adjust VR2 so that the stripped pattern of stroboscope board is stationary.
3. Set the SPEED switch to 33.
   Adjust VR1 in the same way.



SECTION 2
DIAGRAMS

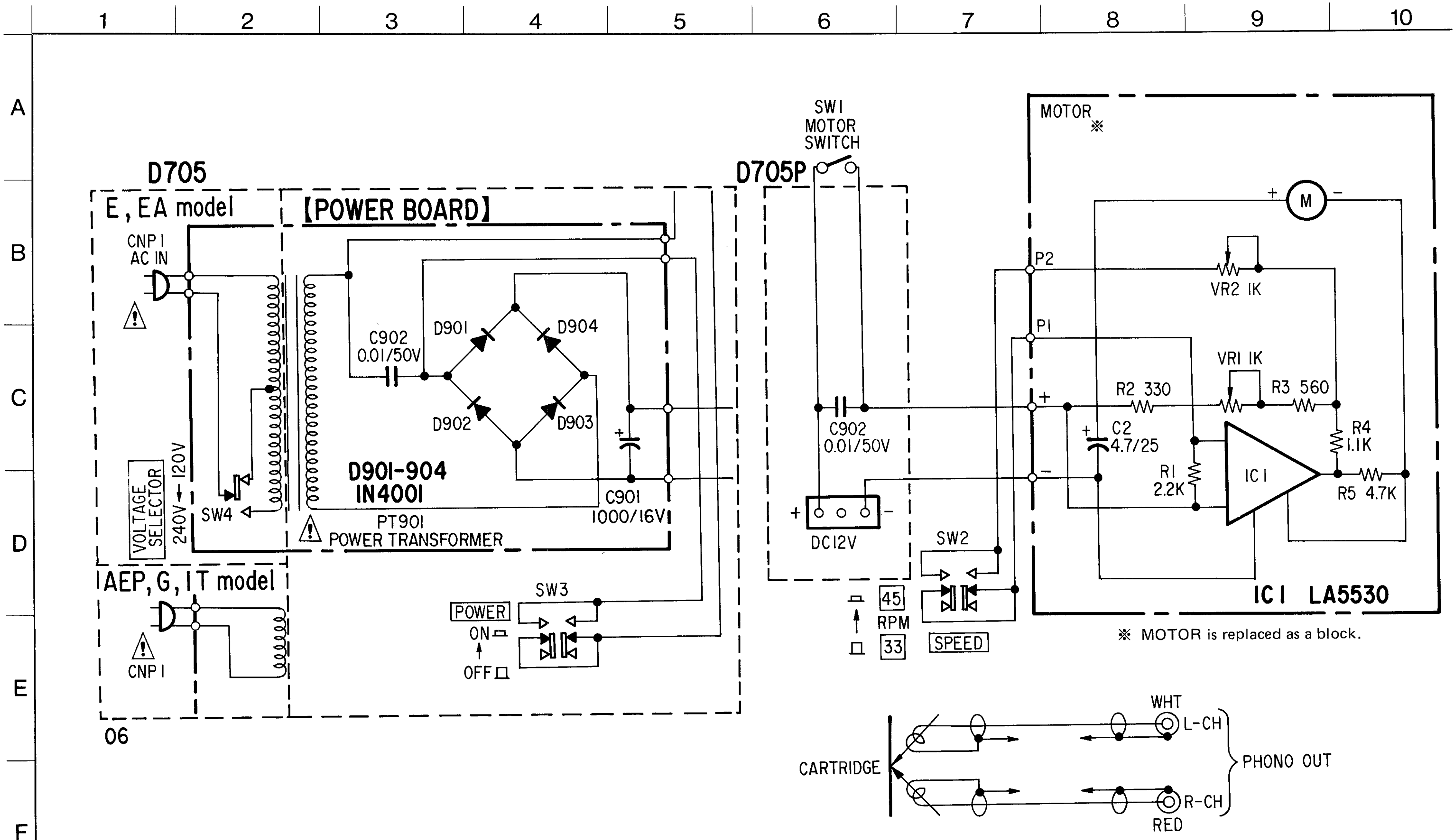
2-1. PRINTED WIRING BOARDS


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
PHONO OUT
WHT
L-CH
RED
R-CH
CNP1
AC IN
【PHONO BOARD】
WHT
WHT
L-CH
R-CH
GND
TO CARTRIDGE
BLK
RED
RED
1-639-237-II
D705:E, EA model
【POWER BOARD】
PT901
C902
D902
D904
D901
D903
C901
1-639-239
II
SW4
VOLTAGE SELECTOR
120V → 240V
ORG
ORG
RED
BLK
BLK
D705:AEP, G, IT model
【POWER BOARD】
PT901
D901
D902
D903
D904
C902
C901
1-639-236
II
SW1
MOTOR SWITCH
ORG
GRY
PLATE BASE
BLK
MOTOR
BLK
WHT
WHT
WHT
D705P
C902
DC12V
+
−
WHT
WHT
45
RPM
33
SW2
SPEED
06
SW3
POWER
ON
OFF

● ○—— : parts extracted from the component side.

● ●—— : parts extracted from the conductor side.

2-2. SCHEMATIC DIAGRAM


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
D705
E, EA model
CNP1
AC IN
VOLTAGE SELECTOR
240V → 120V
SW4
[POWER BOARD]
C902
0.01/50V
D901
D902
D903
D904
D901-904
1N4001
PT901
POWER TRANSFORMER
C901
1000/16V
AEP, G, IT model
CNP1
06
POWER
ON
OFF
SW3
D705P
SW1
MOTOR
SWITCH
C902
0.01/50V
+
−
DC12V
SW2
45
RPM
33
SPEED
MOTOR ※
M
P2
P1
VR2 1K
VR1 1K
R2 330
R3 560
R4 1.1K
C2 4.7/25
R1 2.2K
IC1
R5 4.7K
IC1 LA5530
※ MOTOR is replaced as a block.
CARTRIDGE
WHT
L-CH
R-CH
RED
PHONO OUT

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

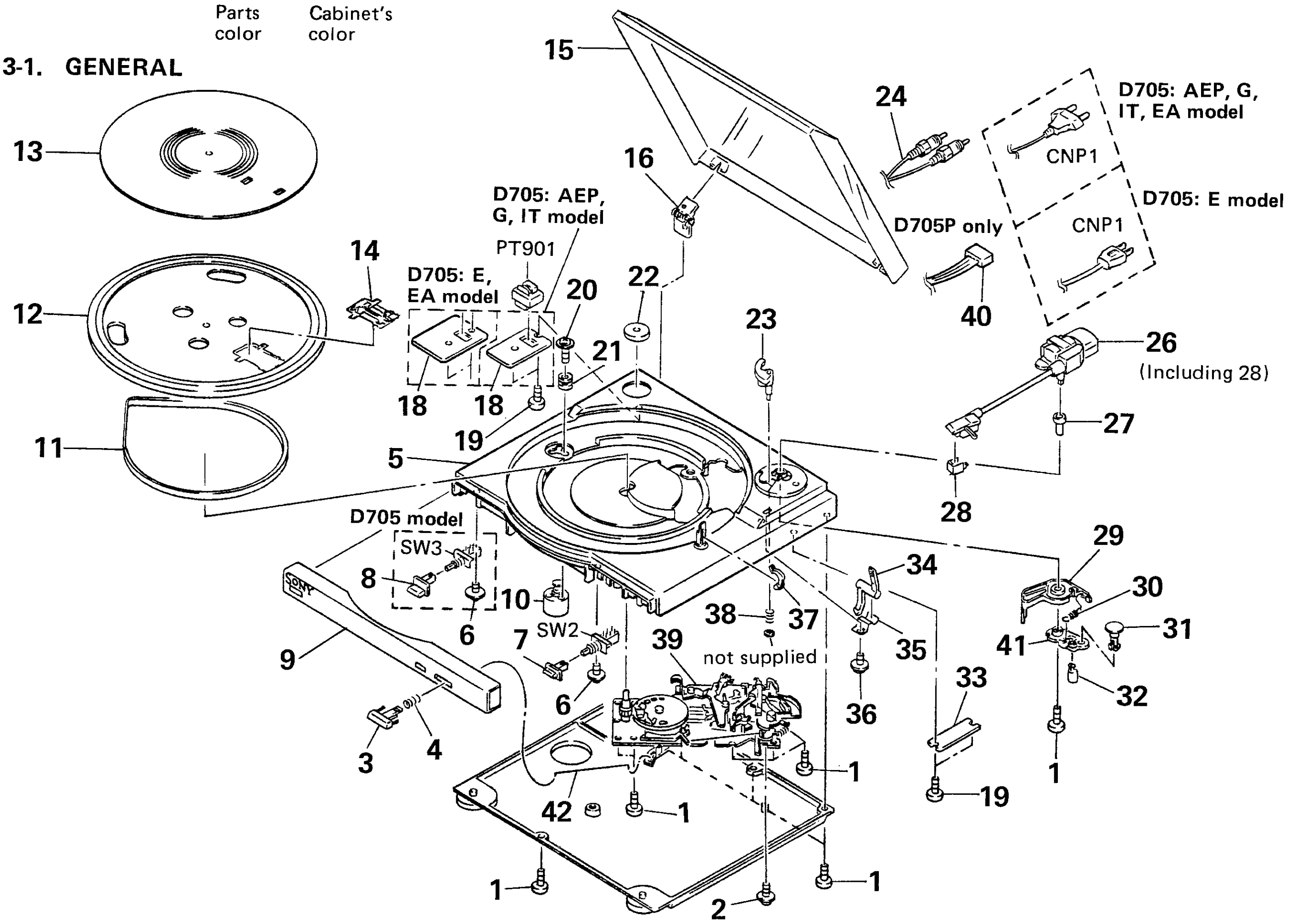
SECTION 3 EXPLODED VIEWS

NOTE:

- −XX, −X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ Parts color ↑ Cabinet's color
- Items marked "∗" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

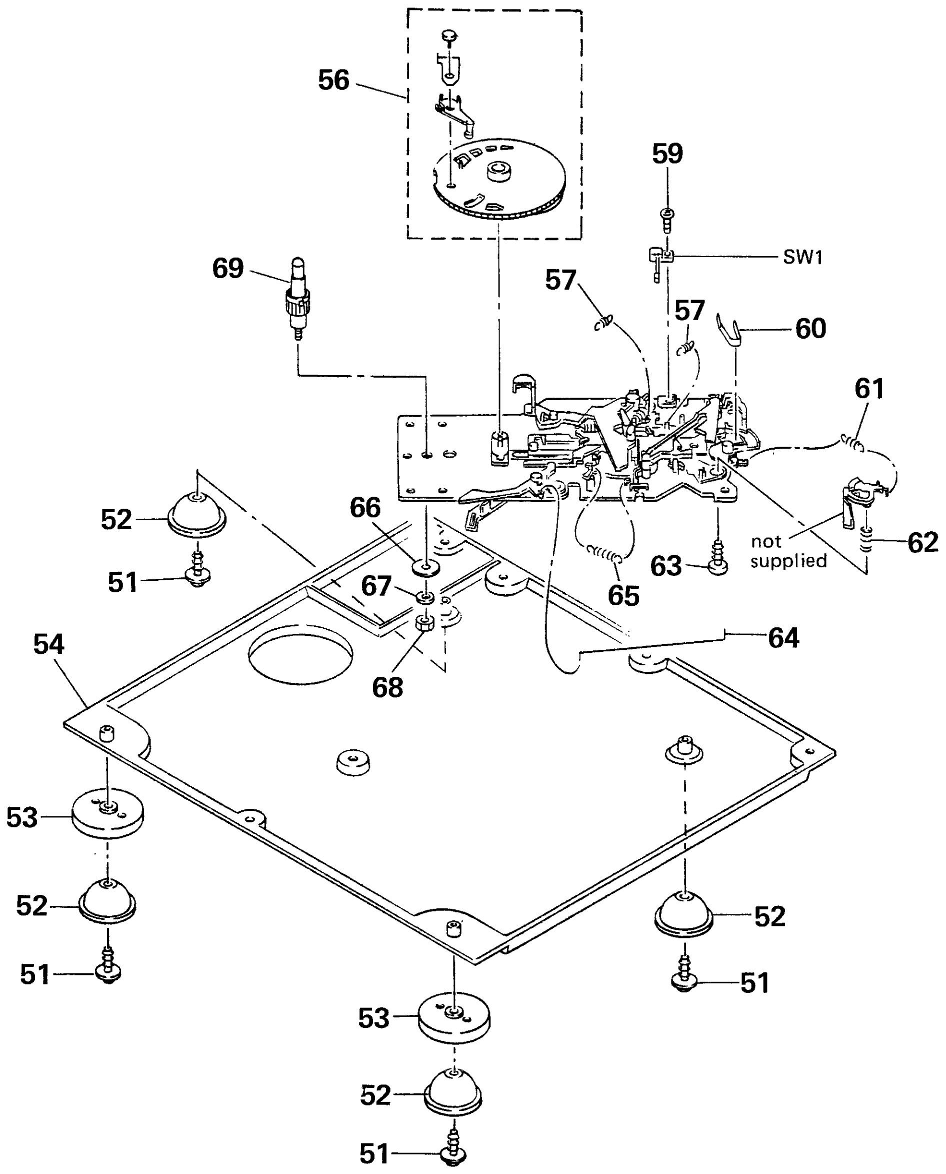
3-1. GENERAL



15
24
D705: AEP, G, IT, EA model
CNP1
D705: E model
CNP1
D705P only
40
13
16
D705: AEP, G, IT model
PT901
14
D705: E, EA model
20
22
23
12
21
26
(Including 28)
18
18
27
11
19
5
28
D705 model
SW3
29
8
10
34
30
6
38
37
31
7
SW2
39
35
41
not supplied
9
6
33
32
36
4
3
1
1
19
42
1
1
1
2

Ref. No.	Part No.	Description	Remark
1	4-946-233-01	SCREW #2, WPT 3X12Y	
2	4-946-234-01	SCREW #2, WPT 3X10X12Y	
3	4-944-680-01	BUTTON, START STOP	
4	4-944-686-01	SPRING, RETURN	
5	∗ 4-944-678-01	CABINET, UPPER	
7	4-944-683-01	BUTTON, SPEED	
8	4-944-681-01	BUTTON, POWER	
9	A-4604-887-A	FRONT PANEL(P-G) ASSY (D705P)	
9	A-4604-888-A	FRONT PANEL(B) ASSY (BLACK) (D705:IT, E)	
9	A-4325-129-A	FRONT PANEL(G) ASSY (GRAY) (D705:AEP, G, E, EA)	
10	1-541-872-11	MOTOR, DC (WITH PULLEY)	
11	4-944-743-01	BELT	
12	4-944-744-01	PLATER	
14	A-4325-130-A	SENSOR ASSY	
15	A-4604-844-A	COVER ASSY, DUST	
16	4-944-691-01	HINGE	
18	∗ 1-639-236-11	POWER BOARD (D705:AEP, G, IT)	
18	∗ 1-639-239-11	POWER BOARD (D705, E, EA)	
19	4-944-729-01	SCREW	
20	4-944-694-01	SCREW, SETTING MOTOR	
21	4-944-692-01	CUSHION, MOTOR	
22	4-944-682-01	ADAPTOR, EP	
23	4-944-675-01	ARM, ELEVATION	
24	1-551-294-00	CORD (PHONO)	
26	A-4604-840-A	ARM ASSY, TONE	
27	∗ 4-944-672-01	BUSHING, TONE ARM	
28	4-944-756-01	CARTRIDGE	
29	4-944-704-01	ARM (B), FEED	
30	4-944-705-01	SPRING, FEED ARM	
31	4-944-759-01	ADJUSTMENT, CAM LEAD IN	
32	4-944-760-01	ADJUSTMENT, CAM LEAD AUTORETURN	
33	∗ 1-639-237-11	PC BOARD, PHONO	
34	4-944-674-01	LEVER, CUING	
35	∗ 4-944-685-01	BRACKET, CUING	
36	4-944-695-01	SCREW	
37	4-944-673-01	LOCKER, ARM	
38	4-944-687-01	SPRING, ELEVATION	
39	∗ A-4604-842-A	MECHANICAL ASSY, BASE	
40	1-590-871-11	CORD (WITH CONNECTOR) 3P (D705P)	
41	4-944-703-01	ARM (A), FEED	
42	4-944-688-01	LINK, START CUT	
CNP1 ⚠·	1-555-750-00	CORD, POWER (D705:AEP, G, IT, EA)	
CNP1 ⚠·	1-551-188-XX	CORD, POWER (D705:E)	
PT901⚠·	1-450-508-11	TRANSFORMER, POWER (D705)	
SW2	1-572-744-11	SWITCH, PUSH (SPEED)	
SW3	1-572-744-11	SWITCH, PUSH (POWER) (D705)	

3-2. MD SECTION


56
59
SW1
69
57
57
60
61
52
66
51
67
54
68
63
65
not supplied
62
64
53
52
51
52
51
53
52
51

Ref. No.	Part No.	Description	Remark
51	4-946-234-01	SCREW #2, WPT 3X10X12Y	
52	4-944-693-01	RUBBER, FOOT	
53	4-944-679-01	COVER, FOOT	
54	* 4-944-684-01	COVER, BOTTOM	
56	A-4325-128-A	RING GEAR ASSY	
57	* 4-944-725-01	SPRING, SWITCH	
59	4-944-728-01	SCREW	
60	* 4-944-726-01	BRACKET, LOCKER	
61	4-944-723-01	SPRING, CONTROL	
62	4-944-722-01	SPRING, CUING CAM	
64	4-944-727-01	LINK, REJECT	
65	4-944-724-01	SPRING, MECHANICAL	
66	4-944-731-01	WASHER, RAIN	
67	4-944-732-01	WASHER, SPRING	
68	4-944-730-01	NUT	
69	A-4604-892-A	CENTER SHAFT ASSY	
SW1	1-572-746-11	SWITCH, LEAF	

SECTION 4
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- –XX, –X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- Items marked "＊" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF: μF
- COILS
  uH: μH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
	* 1-639-236-11	POWER BOARD ***********	
		< CAPACITOR >	
C901	1-124-360-00	ELECT 1000uF 20%	16V
C902	1-136-153-00	FILM 0.01uF	50V
		< DIODE >	
D901	8-719-200-02	DIODE 10E2	
D902	8-719-200-02	DIODE 10E2	
D903	8-719-200-02	DIODE 10E2	
D904	8-719-200-02	DIODE 10E2	
		< SWITCH >	
SW4 ⚠·	1-572-745-11	SELECTOR, POWER (D705:E)	
		< TRANSFORMER >	
PT901⚠·	1-450-508-11	TRANSFORMER, POWER (D705)	

****

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS *************	
10	1-541-872-11	MOTOR, DC (WITH PULLEY)	
18	* 1-639-239-11	POWER BOARD (D705, E, EA)	
24	1-551-294-00	CORD (PHONO)	
33	* 1-639-237-11	PC BOARD, PHONO	
40	1-590-871-11	CORD (WITH CONNECTOR) 3P (D705P)	
CNP1 ⚠·	1-551-188-XX	CORD, POWER (D705:E)	
CNP1 ⚠·	1-555-750-00	CORD, POWER (D705:AEP, G, IT, EA)	
SW1	1-572-746-11	SWITCH, LEAF	
SW2	1-572-744-11	SWITCH, PUSH (SPEED)	
SW3	1-572-744-11	SWITCH, PUSH (POWER) (D705)	

Ref. No.	Part No.	Description	Remark
		ACCESSORY & PACKING MATERIAL ****************************	
	3-753-056-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (D705:AEP, E, EA)	
	3-753-056-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (D705:AEP)	
	* 4-944-747-01	CARTON (D705:AEP)	
	* 4-944-751-01	CARTON (D705P:UK)	
	* 4-944-752-01	CARTON (D705/D705P:E)	
	* 4-944-753-01	CARTON (D705:G, EA)	
	* 4-944-754-01	CARTON (D705:IT)	
	* 4-944-749-01	CUSHION (FRONT)	
	* 4-944-750-01	CUSHION (REAR)	

9-956-352-11

Sony Corporation
Audio Group

English
91C0667-1
Printed in Japan
©1991.3
Published by Customer Relations and Service Group

PS-D705/D705P

SONY
SERVICE MANUAL

AEP Model
E Model
PS-D705

E Model
UK Model
PS-D705P

CORRECTION-1

Correct your service manual as shown below.

☛ : indicates corrected portion.

Page	INCORRECT			CORRECT	
	No.	Part No.	Discription	Part No.	Discription
6	13			4-950-309-01 ☛	SEET, RUBBER

9-956-352-91

Sony Corporation
Audio Group

English
92B0667-1
Printed in Japan
© 1992.2
Published by Customer Relations and Service Group

CDP-C312M

SERVICE MANUAL

US Model
Canadian Model
AEP Model
Australian Model
E Model

SONY
5 DISC AUTOMATIC DISC LOADING SYSTEM

Model Name Using Similar Mechanism	CDP-C311M/C313M/C315M
CD Mechanism Type	CDM16H2-5BD3
Optical Pick-Up Block Type	BU-5BD3

SPECIFICATIONS

System	Compact disc digital audio system
Laser	Semiconductor laser (λ = 780 nm) Emission duration: continuous
Laser output	Max. 44.6 μW* * This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.
Frequency response	2 Hz – 20 kHz (±0.5 dB)
Signal to noise ratio	More than 100 dB
Dynamic range	More than 98 dB
Harmonic distortion	Less than 0.005% (1 kHz)
Channel separation	More than 100 dB (1 kHz)
Wow and flutter	Below measurable limit
Outputs LINE OUT (phono jacks)	Output level 2 V (at 50 kilohms) Load impedance over 10 kilohms

General

Power requirements	US, Canadian model: 120 V AC, 60 Hz Australian model: 240 V AC, 50/60 Hz AEP model: 220—230 V AC, 50/60 Hz E model: 110—120 or 220—240V AC adjustable, 50/60Hz
Power consumption	12 W
Dimensions (not including projecting parts and controls)	Approx. 355 × 120 × 385 mm (w/h/d) (14 × 4¾ × 15¼ inches)
Weight	Approx. 4.9 kg (10 lbs 13 oz)

Supplied accessories

Audio signal connecting cord	1 (phono plug × 2 ↔ phono plug × 2)

Design and specifications subject to change without notice.

COMPACT DISC PLAYER

SONY®

For the European countries

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

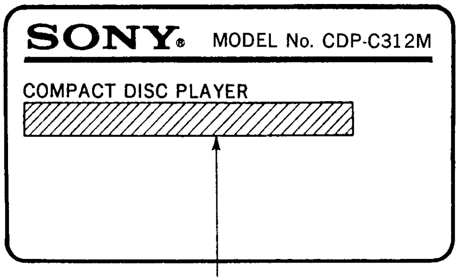
The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential diference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30cm away from the objective lens.

MODEL IDENTIFICATION

—Model Number Label—



US, CND model: AC: 120V 60Hz 12W
AEP model: AC: 220—230V~50/60Hz
AUS model: AC: 240V~50/60Hz
E model: AC: 110—120, 220—240V~50/60Hz 12W

- CND: Canadian model
- AUS: Australian model

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

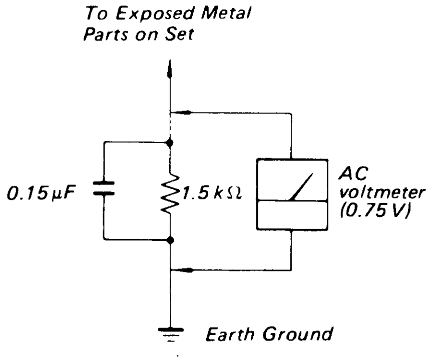


Fig. A. Using an AC voltmeter to check AC leakage.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs a laser. Therefore, be sure to follow carefully the instructions below when servicing.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

1. Laser Diode Properties
   - Material: GaAlAs
   - Wavelength: 780nm
   - Emission Duration: continuous
   - Laser Output Power: less than 44.6 μW*
     - * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.
2. During service, do not take the Optical Pick-up Block apart, and do not adjust the APC circuit. If there is a breakdown in the APC circuit (including laser diode), replace the entire Optical Pick-up Block (including APC board).

BESKYTTELSE AF ØJNE MOD LASERSTRÅLING UNDER SERVICE

I dette apparat anvendes laserlys. Derfor skal nedenstående instruktioner nøje følges under service.

Følg iøvrigt instruktionerne i servicemanualen.

ADVARSEL!!

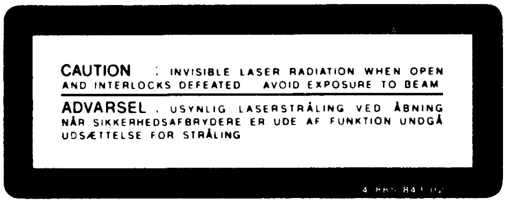
Under service må øjnene ikke komme nær objektiv-linsen på den optiske pick-up enhed. I tilfælde af at det er nødvendigt at kontrollere udsendelsen af laserlys, skal det ske i en afstand af mere end 25 cm fra den optiske pick-up.

1. Laser-didoe data
   - Materiale: GaAlAs
   - Bølgelængde: 780 nm
   - Udstråling: Kontinuerlig
   - Laseroutput: Max. 0,4 mW*
     - * Målt i 1,6 mm afstand fra overfladen af objektiv-linsen pa den optiske pick-up enhed.
   - Klassifikation: Klasse IIIb.
2. Adskil aldrig den optiske pick-up enhed under service, og juster ikke APC kredsløbet (Automatic Power Control). Hvis APC kredsløbet (incl. laser-dioden) bryder ned, skal hele den optiske pick-up enhed (incl. APC printkortet) udskiftes.

LASER ADVARSEL MÆRKNING

Følgende mærkning findes indvendig i apparatet:

1. Advarsel Mærkning



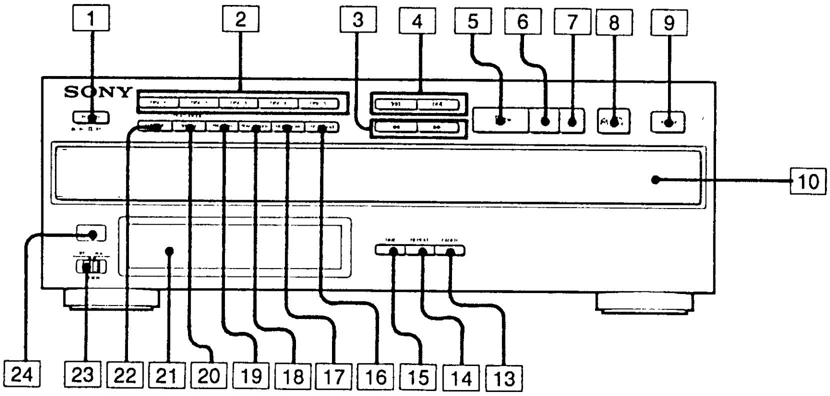
CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED AVOID EXPOSURE TO BEAM

ADVARSEL . USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSÆTTELSE FOR STRÅLING

VAROITUS: Laite sisāltāā, laserdiodin, joka lāhettāā (nākymātōntā) silmille vaarallista lasersateilyā.

SECTION 1
GENERAL

1-1. LOCATION AND CONTROL



1 POWER switch
2 DISC 1-5 buttons
3 ◀◀/▶▶ (manual search) buttons
4 I◀◀/▶▶I (AMS*) buttons
5 ▶ (play) button
6 II (pause) button
7 ■ (stop) button
8 ⏏ OPEN/CLOSE button
9 DISC SKIP button
10 Disc tray
13 FADER button
14 REPEAT button
15 TIME button
16 EDIT/TIME FADE button
17 MUSIC SCAN button
18 PEAK SEARCH button
19 PROGRAM button
20 SHUFFLE button
21 Display window
22 CONTINUE button
23 TIMER switch
24 Remote sensor

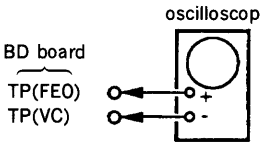
* AMS is the abbreviation of Automatic Music Sensor.

SECTION 2
ELECTRICAL BLOCK CHECKING

Note :

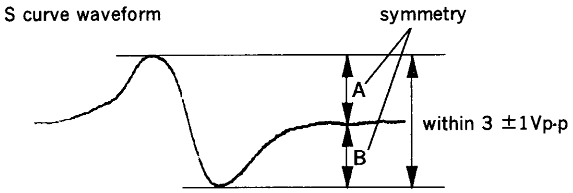
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FEO) on BD board.
2. Connect between test point TP (FES) and TP (VC) by lead wire.
3. Turned Power switch on and actuate the focus serch. (actuate the focus serch when disc table is moving in and out.)
4. Check the oscilloscope waveform (S curve) is symmetrical between A and B. And confirm peak to peak level within 3±1Vp-p.

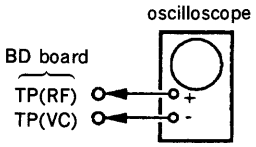


5. After check, remove the lead wire connected in step 2.

Note : • Try to mesure several times to make sure that the ratio of A : B or B : A is more than 10 : 7.

- Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

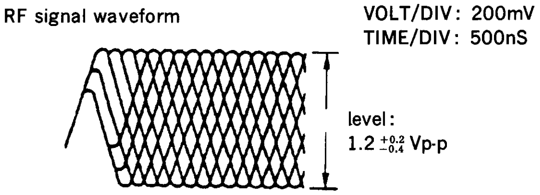


Procedure :

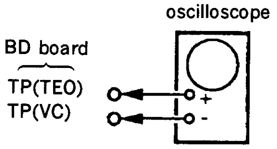
1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turn Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note :

Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.

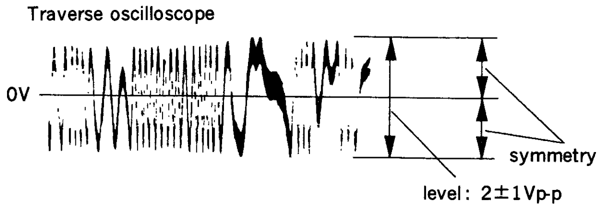


E-F Balance Check



Procedure :

1. Connect test point TP (AFJ) to ground and TP (TES) to TP (VC) with lead wire.
2. Connect oscilloscope to test point TP (TEO) on BD board.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the osilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level.

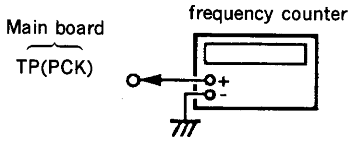


6. Remove the lead wire connected in step 1.

RF PLL Free-run Frequency Check

Procedure :

1. Connect frequency counter to test point (PCK) with lead wire.


Main board
TP(PCK)
frequency counter
+
-

2. Turn Power switch on.
3. Confirm that reading on frequency counter is 4.3218MHz.

Focus/Tracking Gain

This gain has a margin, so even if it is slightly off.

There is no problem.

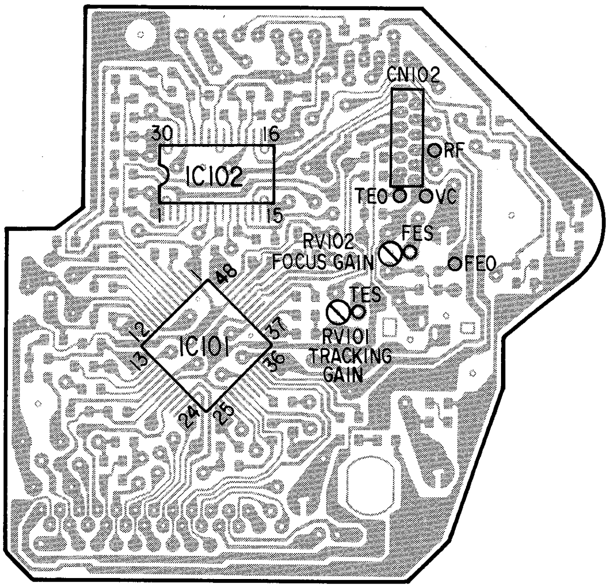
Therefore, do not perform, this adjustment.

Please note that it should be fixed to mechanical center position when you moved and do not know original position.

Adjustment Locations :

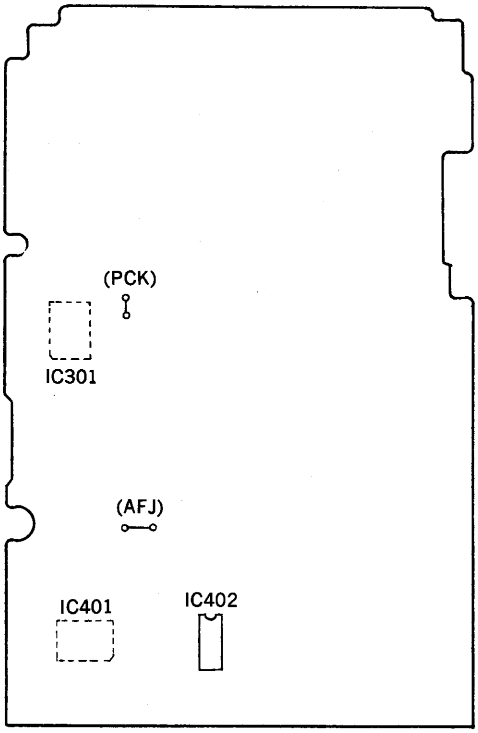
【BD board】

—conductor side—


CN102
30
16
IC102
1
15
RF
TEO
VC
RV102
FOCUS GAIN
FES
FEO
48
TES
12
13
IC101
37
36
RV101
TRACKING
GAIN
24
25

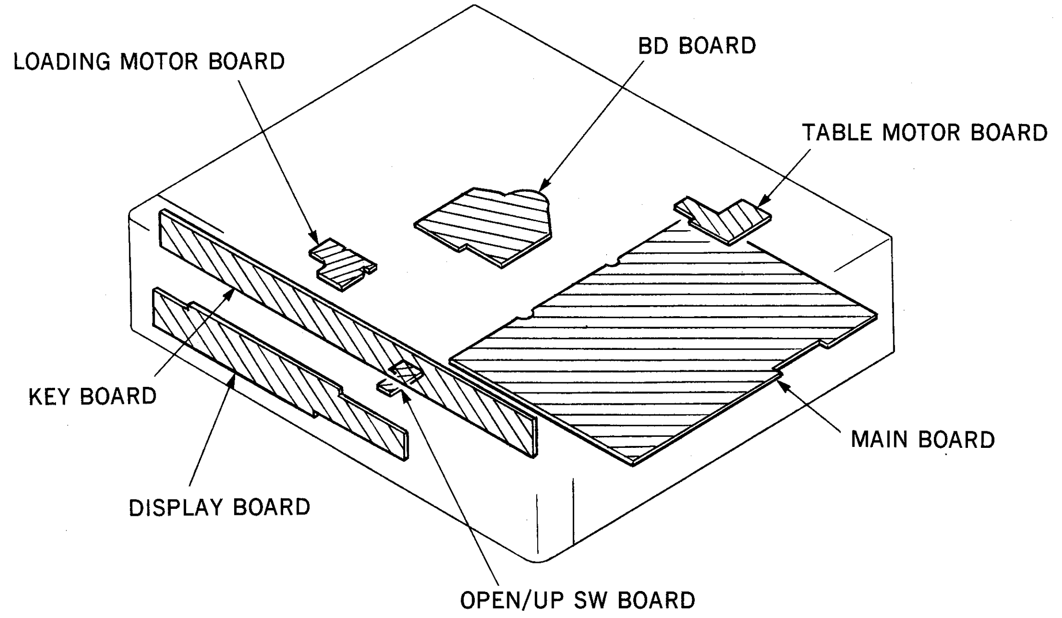
【MAIN board】

—component side—


(PCK)
IC301
(AFJ)
IC401
IC402

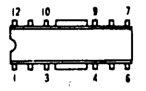
SECTION 3
DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION

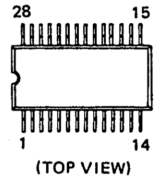

LOADING MOTOR BOARD
BD BOARD
TABLE MOTOR BOARD
KEY BOARD
MAIN BOARD
DISPLAY BOARD
OPEN/UP SW BOARD

3-2. SEMICONDUCTOR LEAD LAYOUTS

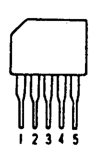
CXA1291P


12
10
9
7
1
3
4
6

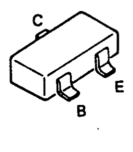
CXD2561M


28
15
1
14
(TOP VIEW)

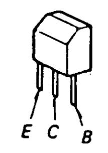
M5293L



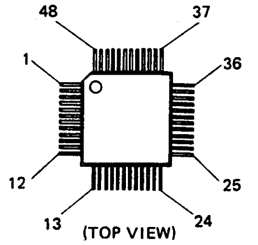
DTC144EK



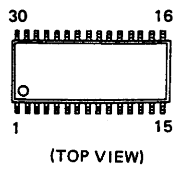
2SD774-34



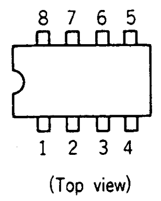
CXA1372Q


48
37
1
36
12
25
13
24
(TOP VIEW)

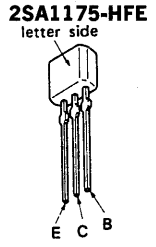
LA6532M


30
16
1
15
(TOP VIEW)

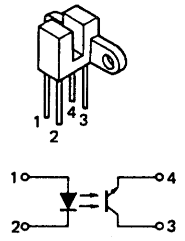
RC4558P
TL082CP


8 7 6 5
1 2 3 4
(Top view)

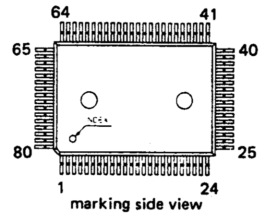
2SA1175-HFE


letter side
E
C
B

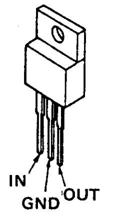
GP-1A521



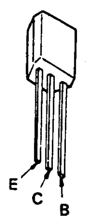
CXD2500AQ
CXP50116-213Q


64
41
65
40
80
25
1
24
marking side view

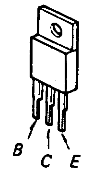
M5F7807L



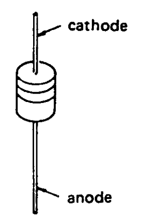
DTA144ES
DTC144ES



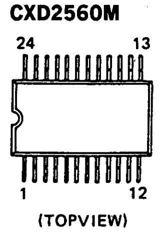
2SB1094-L



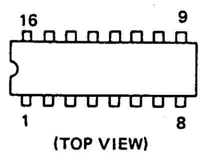
RD5.6ES-B2
RD6.8ES-B2
11EQS04
11ES2
1SS120


cathode
anode

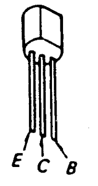
CXD2560M


24
13
1
12
(TOPVIEW)

M5290P-16


16
9
1
8
(TOP VIEW)

2SC1815-Y
2SC2878-AB
2SC3623A-LK

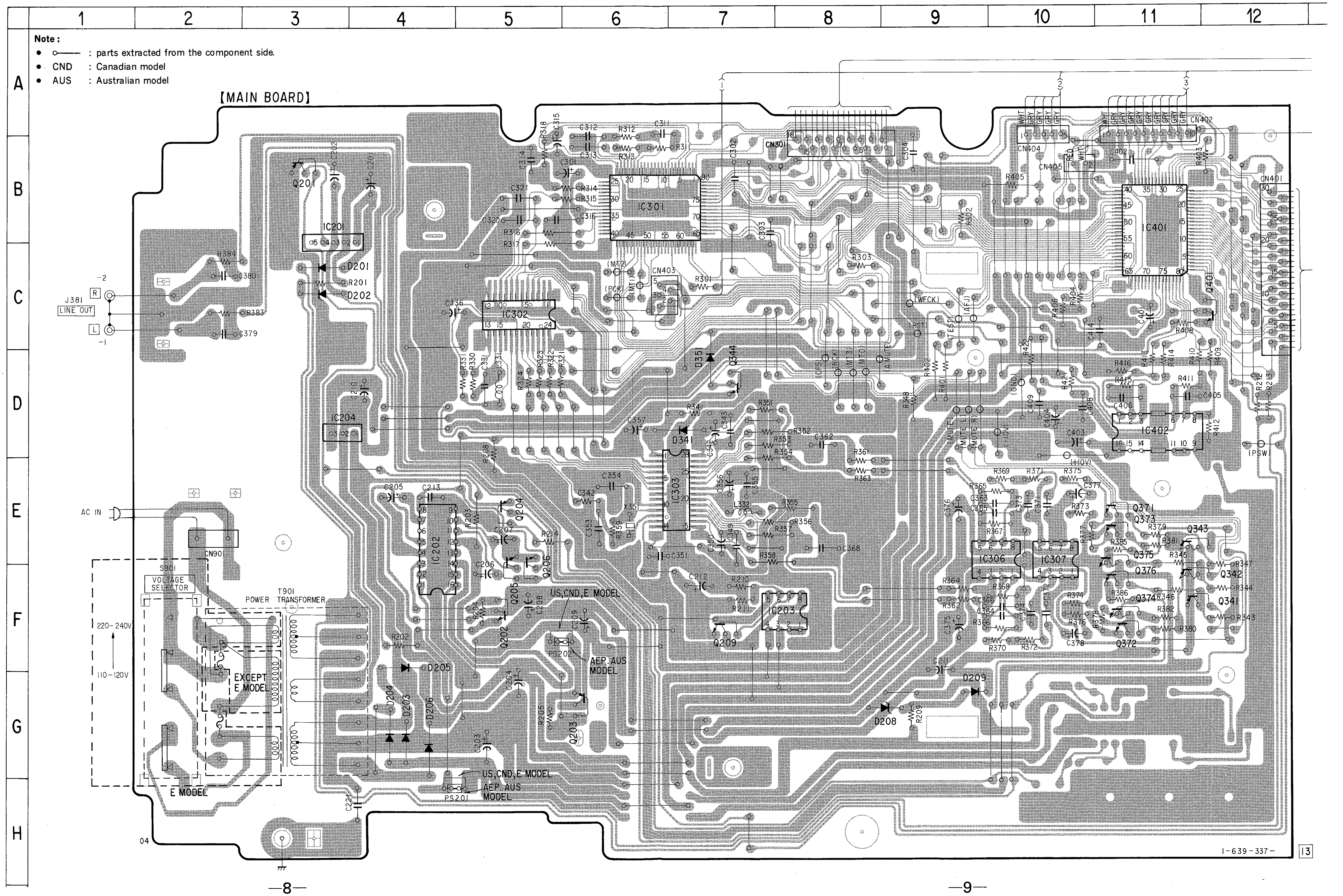


• Semiconductor Location

Ref. No.	Location
D201	C-3
D202	C-3
D203	G-4
D204	G-4
D205	F-4
D206	G-4
D208	G-9
D209	G-9
D341	D-7
D351	D-7
IC201	B-3
IC202	E-4
IC203	F-8
IC204	D-3
IC301	B-6
IC302	C-5
IC303	E-7
IC306	E-9
IC307	E-10
IC401	B-11
IC402	D-11
Q201	B-3
Q202	F-5
Q203	G-6
Q204	E-5
Q205	F-5
Q206	F-5
Q209	F-7
Q341	F-11
Q342	F-11
Q343	E-11
Q344	D-7
Q371	E-11
Q372	F-11
Q373	E-11
Q374	F-11
Q375	E-11
Q376	F-11
Q401	C-12

3-3. PRINTED WIRING BOARD—Main Board Suffix-13—

Note :
- ○— : parts extracted from the component side.
- CND : Canadian model
- AUS : Australian model


1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
【MAIN BOARD】
J381
LINE OUT
R
L
AC IN
S901
VOLTAGE SELECTOR
220-240V
110-120V
POWER TRANSFORMER
T901
EXCEPT E MODEL
E MODEL
CN901
US,CND,E MODEL
AEP,AUS MODEL
PS201
PS202
IC201
IC202
IC203
IC204
IC301
IC302
IC303
IC306
IC307
IC401
IC402
CN301
CN401
CN402
CN403
CN404
CN405
Q201
Q202
Q203
Q204
Q205
Q206
Q209
Q341
Q342
Q343
Q344
Q371
Q372
Q373
Q374
Q375
Q376
D201
D202
D203
D204
D205
D206
D208
D209
D341
D351
(PSW)
1-639-337-
13

• Semiconductor Location

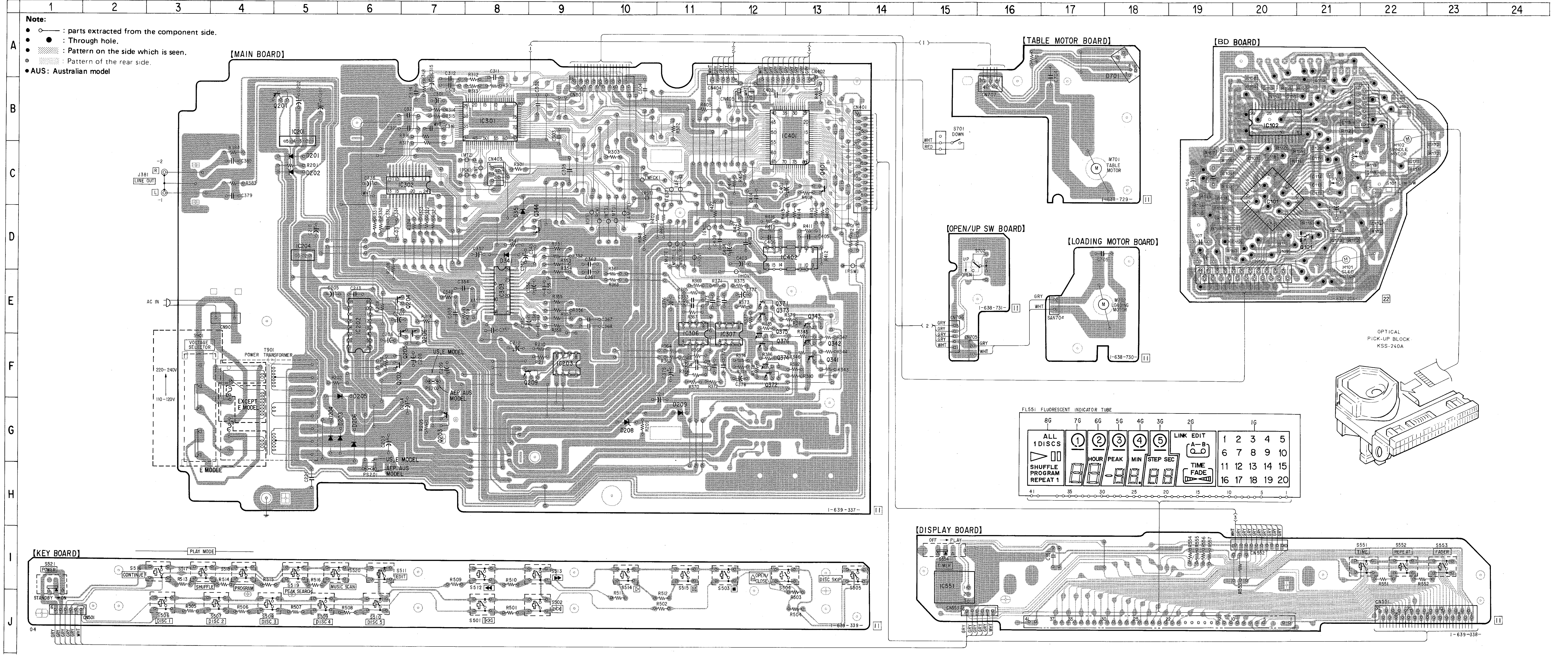
Ref. No.	Location
D201	C-5
D202	C-5
D203	G-6
D204	G-5
D205	F-6
D206	G-6
D208	G-10
D209	G-11
D341	D-8
D351	D-8
D701	A-18
IC101	C-20
IC102	B-20
IC201	B-5
IC202	E-6
IC203	F-9
IC204	D-5
IC301	B-8
IC302	C-7
IC303	E-8
IC306	E-11
IC307	E-12
IC401	B-13
IC402	D-13
IC551	I-15
Q101	D-21
Q201	B-5
Q202	F-6
Q203	G-7
Q204	E-7
Q205	F-7
Q206	F-7
Q209	F-9
Q341	F-13
Q342	F-13
Q343	E-13
Q344	D-9
Q371	E-12
Q372	F-12
Q373	E-12
Q374	F-12
Q375	E-12
Q376	F-12
Q401	C-13

3-4. PRINTED WIRING BOARDS—Main Board Suffix-11—

• Refer to Page 7 for Semiconductor Lead Layouts.

Note:

- ○—— : parts extracted from the component side.
- ● : Through hole.
- ▒ : Pattern on the side which is seen.
- ░ : Pattern of the rear side.
- AUS: Australian model


1
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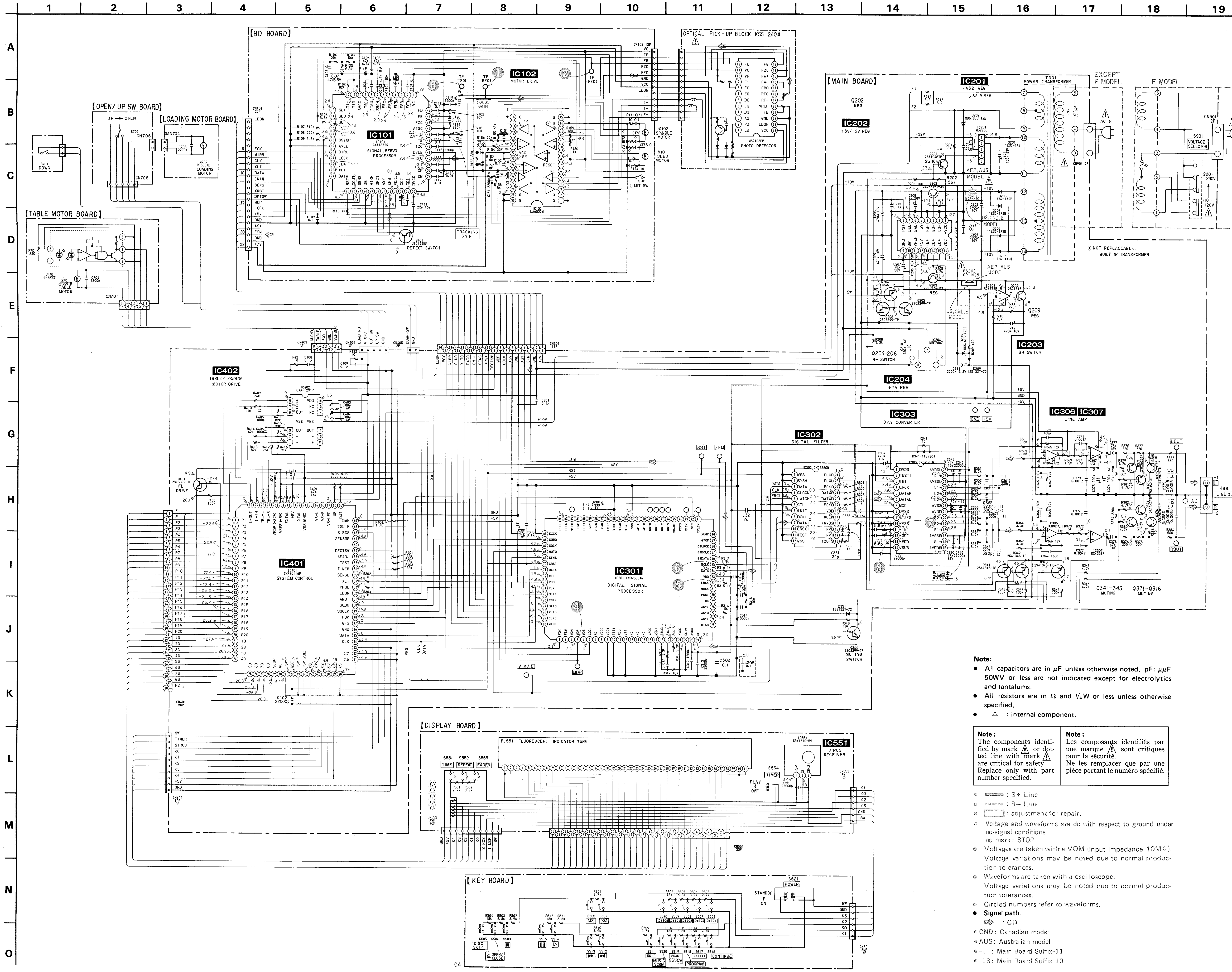
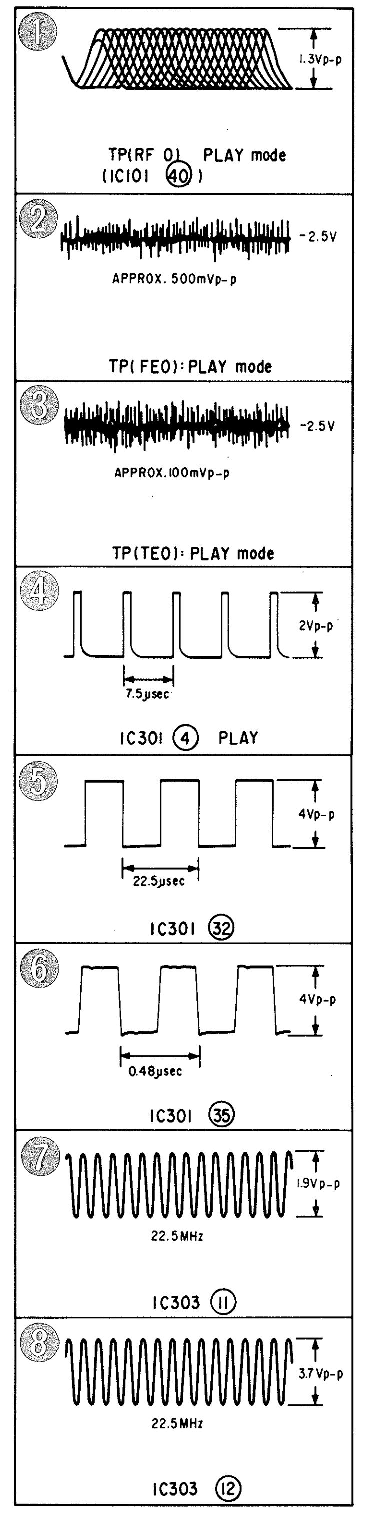
15
16
17
18
19
20
21
22
23
24
A
B
C
D
E
F
G
H
I
J
[MAIN BOARD]
J381
LINE OUT
R
L
AC IN
CN901
S901
VOLTAGE SELECTOR
220-240V
110-120V
POWER TRANSFORMER
T901
EXCEPT E MODEL
E MODEL
US,E MODEL
AEP,AUS MODEL
IC201
IC202
IC203
IC204
IC301
IC302
IC303
IC306
IC307
IC401
IC402
1-639-337-11
[TABLE MOTOR BOARD]
D701
CN707
M701 TABLE MOTOR
1-638-729-11
S701 DOWN
WHT
RED
[OPEN/UP SW BOARD]
S702
UP
OPEN
1-638-731-11
[LOADING MOTOR BOARD]
M702 LOADING MOTOR
1-638-730-11
[BD BOARD]
IC101
IC102
Q101
M101 SLED
M102 SPINDLE MOTOR
S101 LIMIT SW
22
OPTICAL PICK-UP BLOCK KSS-240A
FL551 FLUORESCENT INDICATOR TUBE
ALL
1DISCS
SHUFFLE
PROGRAM
REPEAT 1
HOUR
PEAK
MIN
STEP SEC
LINK
EDIT
TIME FADE
[DISPLAY BOARD]
OFF
PLAY
S554 TIMER
IC551
S551 TIME
S552 REPEAT
S553 FADER
CN551
CN552
1-639-338-11
[KEY BOARD]
PLAY MODE
S521 POWER
STANDBY
ON
S516 CONTINUE
S517 SHUFFLE
S518 PROGRAM
S519 PEAK SEARCH
S520 MUSIC SCAN
S511 EDIT
S512
S513
S514
S515
S501
S502
S503
S504 OPEN/CLOSE
S505 DISC SKIP
S506 DISC 1
S507 DISC 2
S508 DISC 3
S509 DISC 4
S510 DISC 5
CN501
1-639-339-11
GRY
WHT

3-5. SCHEMATIC DIAGRAM



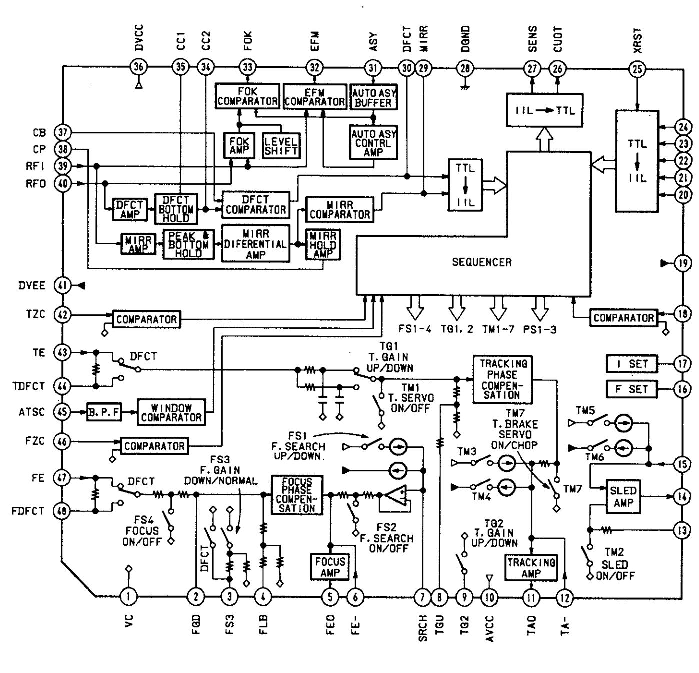
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
A B C D E F G H I J K L M N O
[BD BOARD]
[OPEN/UP SW BOARD]
[LOADING MOTOR BOARD]
[TABLE MOTOR BOARD]
OPTICAL PICK-UP BLOCK KSS-240A
IC101 SIGNAL, SERVO PROCESSOR
IC102 MOTOR DRIVE
M101 SPINDLE MOTOR
M101 SLED MOTOR
S101 LIMIT SW
PHOTO DETECTOR
DETECT SWITCH
FOCUS GAIN
TRACKING GAIN
[MAIN BOARD]
IC201 +V32 REG
IC202 +5V/-5V REG
IC203 B+ SWITCH
IC204 +7V REG
Q202 REG
Q209 REG
Q204-206 B+ SWITCH
T901 POWER TRANSFORMER
EXCEPT E MODEL
E MODEL
S901 VOLTAGE SELECTOR
AC IN
NOT REPLACEABLE: BUILT IN TRANSFORMER
IC402 TABLE/LOADING MOTOR DRIVE
IC401 SYSTEM CONTROL
IC301 DIGITAL SIGNAL PROCESSOR
IC302 DIGITAL FILTER
IC303 D/A CONVERTER
IC306 IC307 LINE AMP
Q341-343 MUTING
Q371-Q316 MUTING
Q351 MUTING SWITCH
J381 LINE OUT
[DISPLAY BOARD]
FL551 FLUORESCENT INDICATOR TUBE
IC551 SIRCS RECEIVER
S551 TIME
S552 REPEAT
S553 FADER
S554 TIMER
PLAY OFF
[KEY BOARD]
S521 POWER
STANDBY ON
DISC SKIP
OPEN/CLOSE
MUSIC SCAN
PEAK SEARCH
SHUFFLE
PROGRAM
CONTINUE
04

• Wave forms



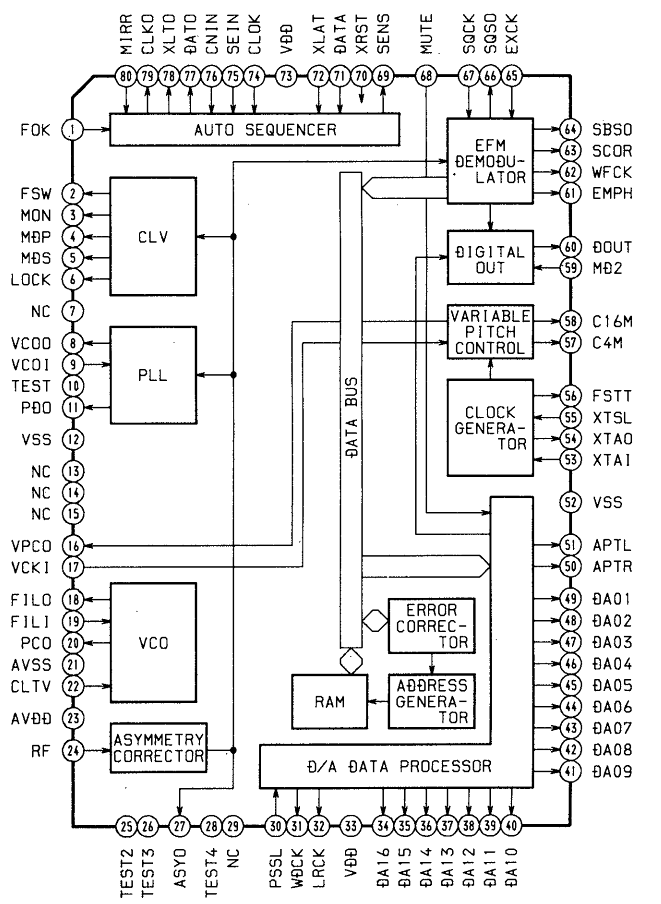
• IC Block Diagrams

IC101 CXA1372Q



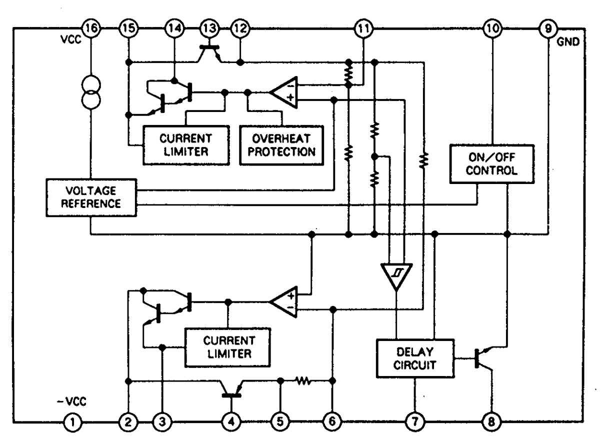
FOK COMPARATOR
EFM COMPARATOR
AUTO ASYMMETRY BUFFER
LEVEL SHIFT
AUTO ASY CONTROL AMP
TTL ECL
SEQUENCER
COMPARATOR
WINDOW COMPARATOR
TRACKING PHASE COMPEN-SATION
FOCUS AMP
TRACKING AMP
SLED AMP
DATA
XLT
CLK
LOCK
DIRC
ISET
FSET
SL-
SLO
SL+

IC301 CXD2500AQ



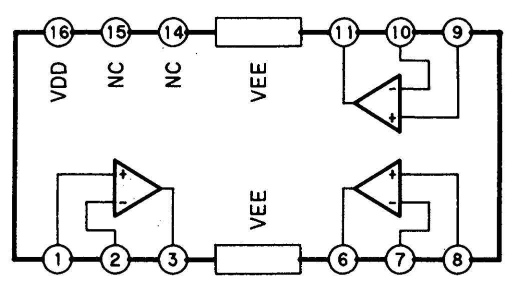
AUTO SEQUENCER
EFM DEMODULATOR
CLV
DIGITAL OUT
VARIABLE PITCH CONTROL
PLL
CLOCK GENERATOR
DATA BUS
VCO
ERROR CORRECTOR
RAM
ADDRESS GENERATOR
ASYMMETRY CORRECTOR
D/A DATA PROCESSOR
FOK
FSW
MON
MDP
MDS
LOCK
NC
VCOO
VCOI
TEST
PDO
VSS
VPCO
VCKI
FILO
FILI
PCO
AVSS
CLTV
AVDD
RF
SBSO
SCOR
WFCK
EMPH
DOUT
MD2
C16M
C4M
FSTT
XTSL
XTAO
XTAI
VSS
APTL
APTR
DA01
DA02
DA03
DA04
DA05
DA06
DA07
DA08
DA09
MIRR
CLKO
XLTO
DATO
CNIN
SEIN
CLOK
VDD
XLAT
DATA
XRST
SENS
MUTE
SQCK
SQSO
EXCK
TEST2
TEST3
ASYO
TEST4
NC
PSSL
WDCK
LRCK
VDD
DA16
DA15
DA14
DA13
DA12
DA11
DA10

IC202 M5290P



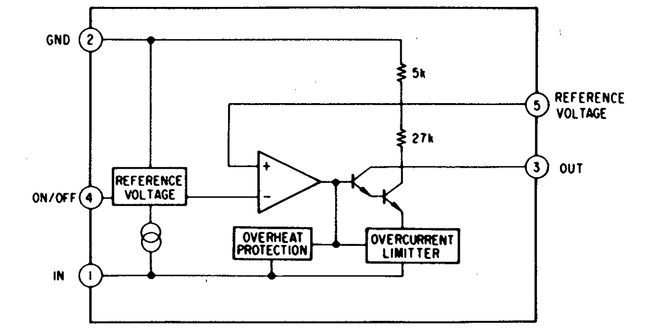
CURRENT LIMITER
OVERHEAT PROTECTION
VOLTAGE REFERENCE
ON/OFF CONTROL
CURRENT LIMITER
DELAY CIRCUIT
-VCC
VCC
GND

IC402 CXA1291P



VDD
NC
NC
VEE
VEE

IC201 M5293L



GND
ON/OFF
IN
REFERENCE VOLTAGE
OVERHEAT PROTECTION
OVERCURRENT LIMITTER
5k
27k
REFERENCE VOLTAGE
OUT

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.

Note :	**Note :**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬ : B+ Line
- ▭ : B– Line
- ☐ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : STOP
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- **Signal path.**
  ⇨ : CD
- CND : Canadian model
- AUS : Australian model
- -11 : Main Board Suffix-11
- -13 : Main Board Suffix-13

SECTION 4
EXPLODED VIEWS

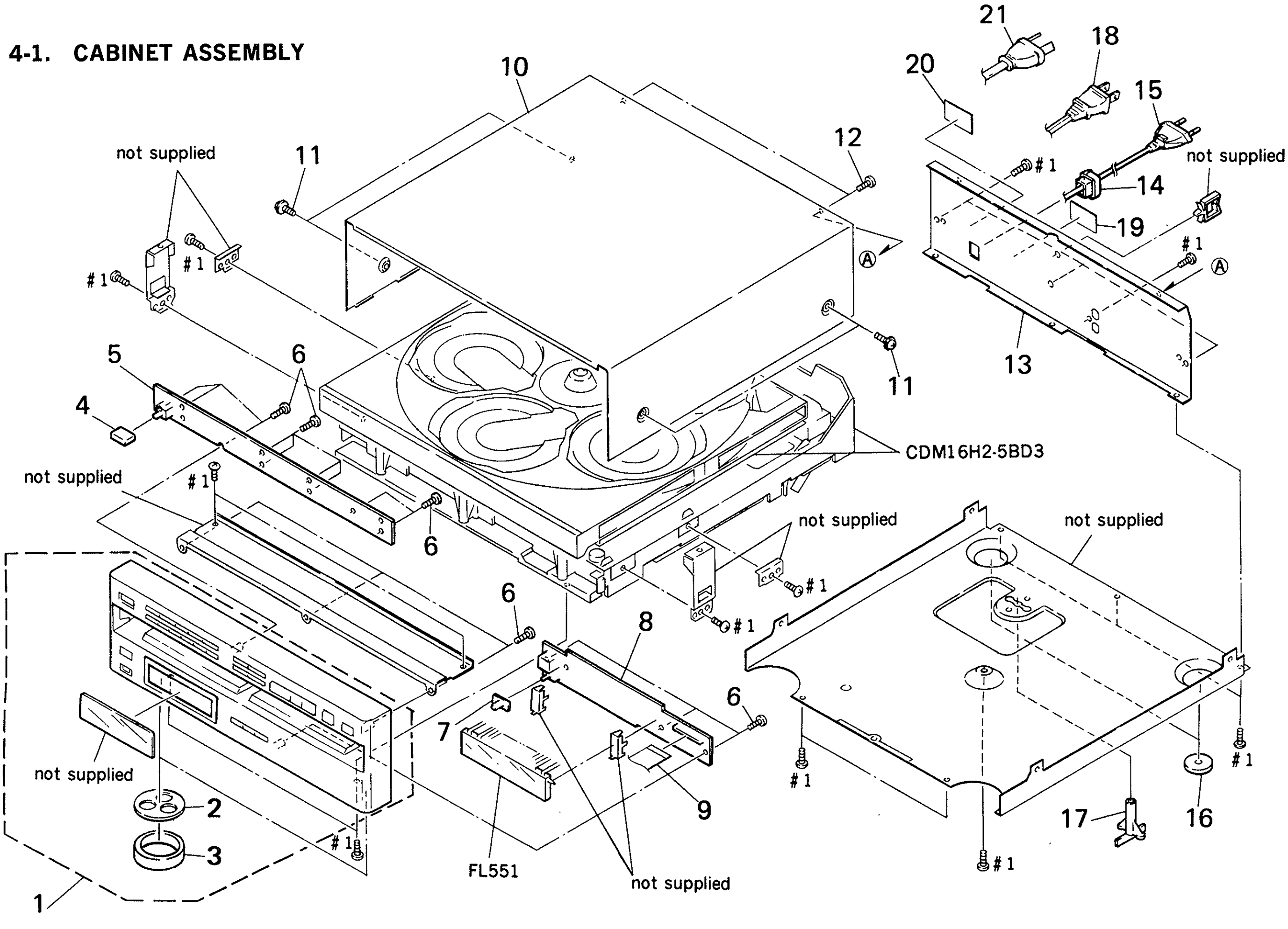
NOTE :

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE)...(RED)
  ↑ Parts Color ↑ Cabinet's Color
- CND : Canadian model
- AUS : Australian model
- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

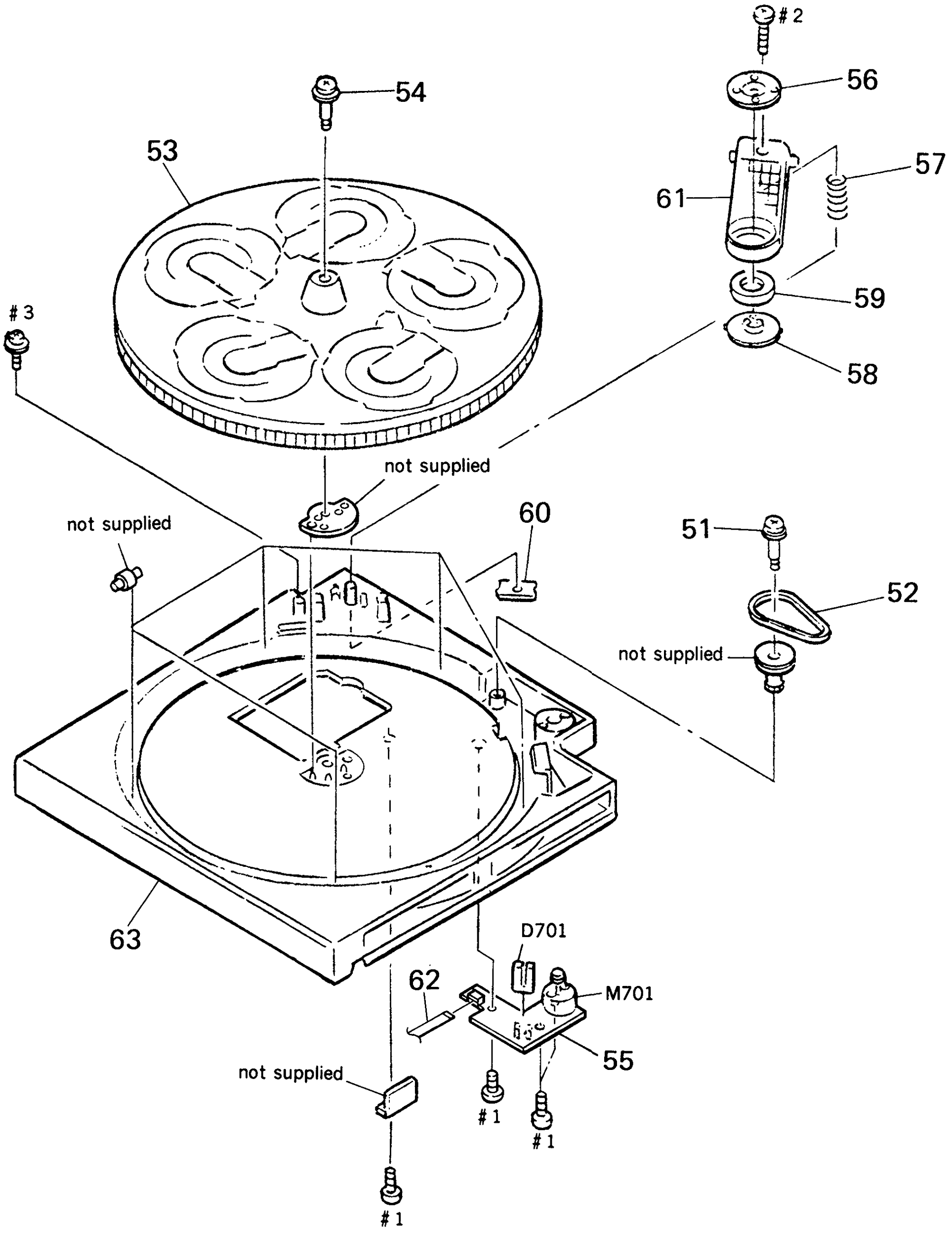
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

4-1. CABINET ASSEMBLY



Ref. No.	Part No.	Description	Remark
1	X-4941-569-1	PANEL ASSY, FRONT (AEP, AUS, E)	
1	X-4941-570-1	PANEL ASSY, FRONT (US, CND)	
2	4-921-906-01	FELT	
3	4-921-918-11	PLATE, ORNAMENTAL	
4	4-927-341-01	BUTTON (POWER)	
5	* 1-639-339-11	KEY BOARD	
6	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
7	4-922-518-01	KNOB (TIMER)	
8	* 1-639-338-11	DISPLAY BOARD	
9	1-590-905-11	WIRE, FLAT TYPE (30 CORE)	
10	* 4-943-992-01	CASE	
11	3-704-366-01	SCREW (CASE) (M3X8)	
12	3-703-685-21	SCREW (+BV 3X8)	
13	* 4-943-120-71	PANEL, BACK (AEP)	
13	* 4-943-120-81	PANEL, BACK (AUS)	
13	* 4-943-120-91	PANEL, BACK (US)	
13	* 4-943-120-61	PANEL, BACK (E)	
13	* 4-943-844-11	PANEL, BACK (CND)	
14	* 3-703-244-00	BUSHING (2104), CORD	
14	* 3-703-571-11	BUSHING (S) (4516), CORD (E)	
15	⚠. 1-575-651-21	CORD, POWER (AEP)	
16	4-924-410-01	FELT	
17	4-937-945-01	PLATE (TRANSPORT), LOCK	
18	⚠. 1-590-836-11	CORD, POWER (US, CND)	
19	* 4-941-548-01	LABEL, CLASS 1 (AEP, E)	
20	* 4-941-548-01	LABEL, CLASS 1 (AUS)	
21	⚠. 1-574-358-31	CORD, POWER (WITH CONNECTOR) (AUS)	
FL551	1-519-655-21	FLUORESCENT INDICATOR	

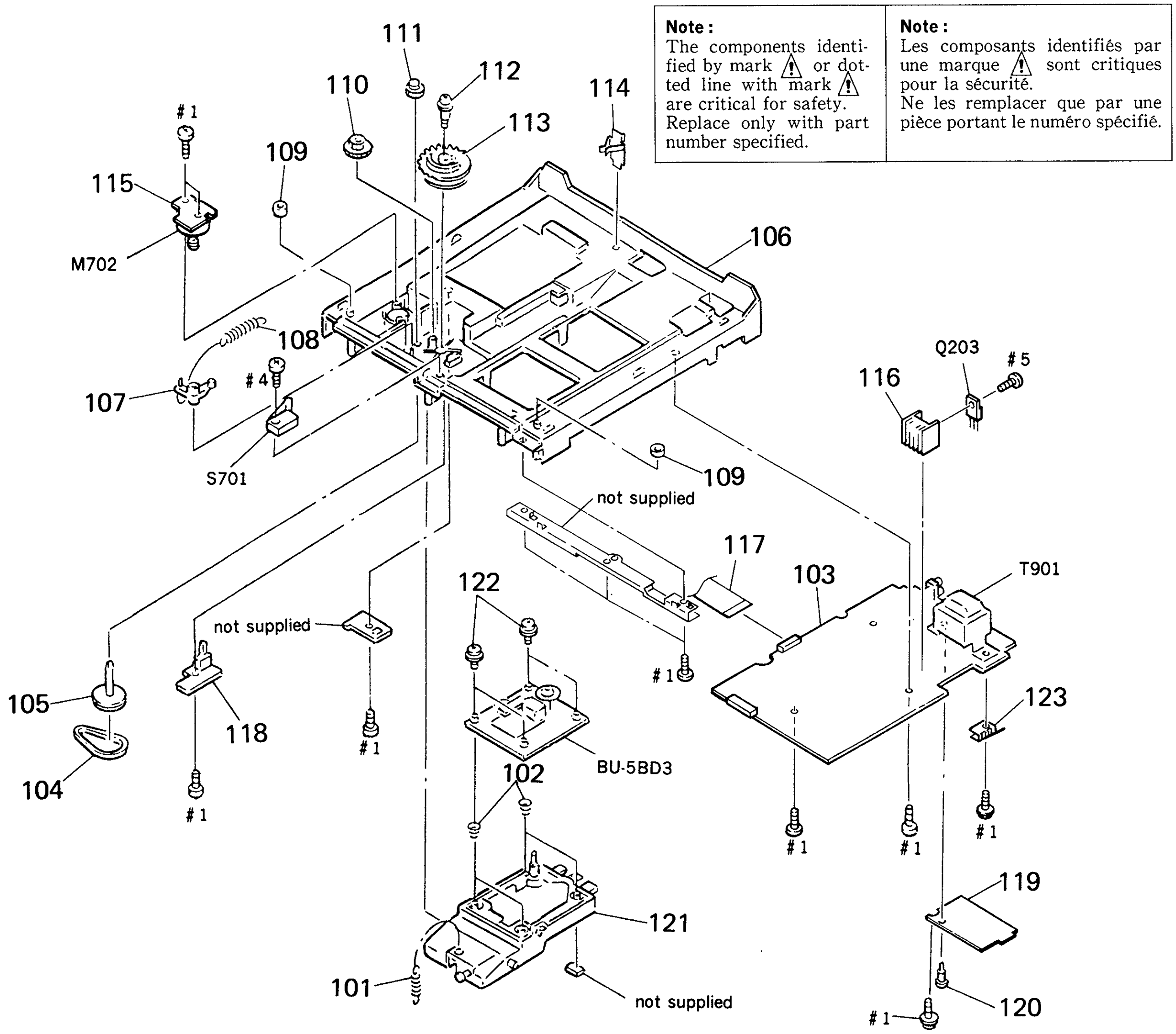
4-2. TRAY ASSEMBLY


#2
56
54
53
57
61
59
#3
58
not supplied
60
not supplied
51
52
not supplied
63
D701
62
M701
55
not supplied
#1
#1
#1

Ref. No.	Part No.	Description	Remark
51	4-923-597-01	SCREW, STEP	
52	4-926-399-01	BELT	
53	* 4-926-383-02	TABLE (B), DISK	
54	4-926-384-01	SCREW, STEP	
55	* 1-638-729-11	TABLE MOTOR BOARD	
56	4-921-029-01	YOKE, CHUCKING	
57	4-926-395-01	SPRING, COMPRESSION	
58	4-921-022-01	PULLEY, CHUCKING	
59	1-452-340-21	MAGNET	
60	* 4-926-388-01	BRACKET (ADJUSTMENT)	
61	* 4-930-506-02	BRACKET (PRESS PULLEY)	
62	1-590-849-11	WIRE, FLAT TYPE (5 CORE)	
63	4-943-995-11	TABLE (A), DISC	
D701	8-719-970-19	DIODE GP1A52I	
M701	A-4604-585-A	MOTOR ASSY, ROTARY	

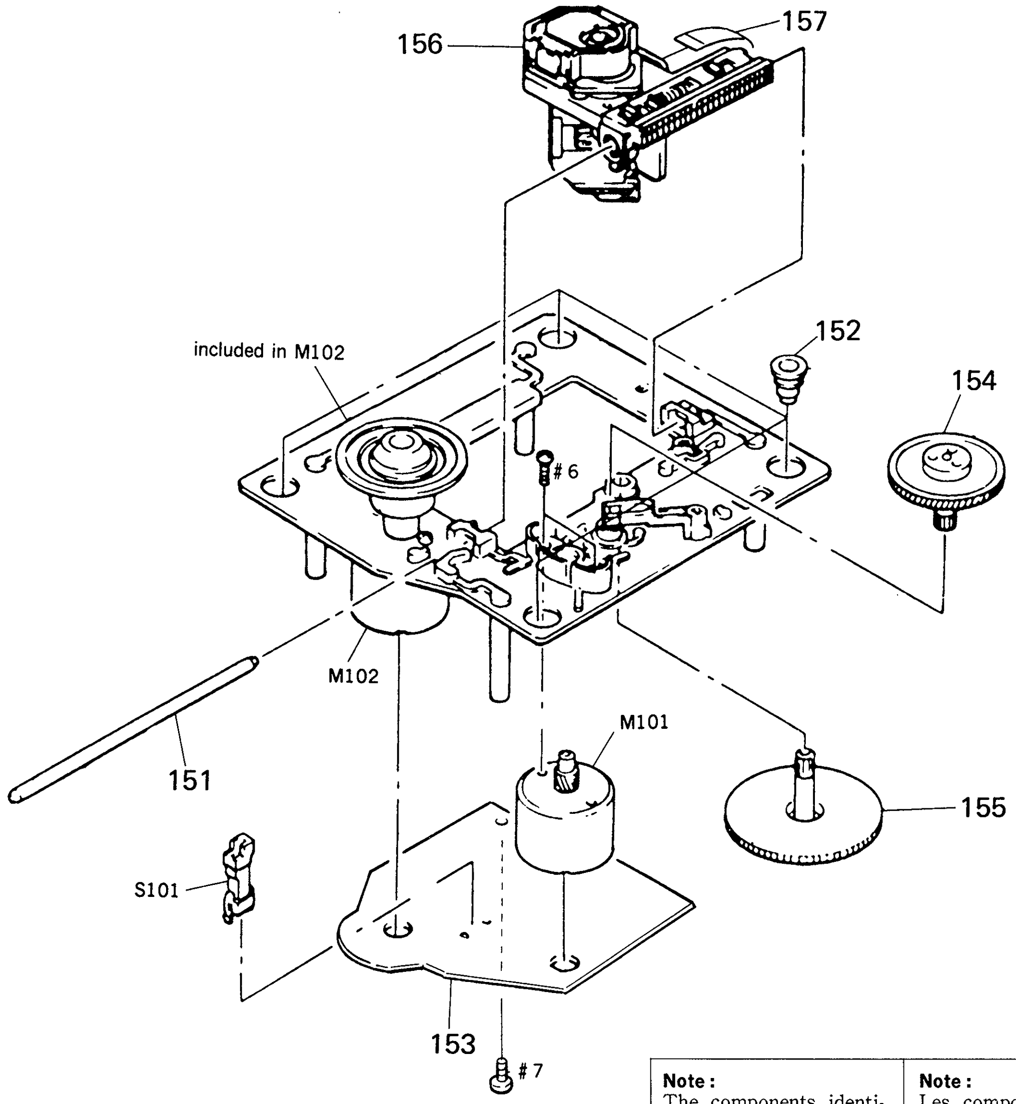
4-3. CHASSIS ASSEMBLY

Note :	**Note :**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.


111
112
110
114
113
#1
109
115
M702
106
108
107
#4
S701
109
Q203
#5
116
not supplied
117
103
T901
122
not supplied
105
118
#1
#1
123
BU-5BD3
102
104
#1
#1
#1
#1
119
121
101
not supplied
#1
120

Ref. No.	Part No.	Description	Remark
101	4-937-911-01	SPRING, TENSION	
102	4-917-541-01	SPRING (B)	
103	* A-4617-854-A	MAIN BOARD, COMPLETE (AEP, AUS)	
103	* A-4617-888-A	MAIN BOARD, COMPLETE (US, CND)	
103	* A-4617-857-A	MAIN BOARD, COMPLETE (E)	
104	4-944-490-01	BELT (TIMING)	
105	X-4941-529-1	PULLEY ASSY	
106	* 4-943-997-01	CHASSIS	
107	4-917-519-01	LEVER, SET	
108	4-924-412-01	SPRING (B), TENSION	
109	* 4-934-382-01	CUSHION	
110	4-934-381-01	GEAR (LOADING C)	
111	4-934-375-01	GEAR (LOADING B)	
112	4-926-317-01	SCREW, STEP	
113	4-934-391-01	GEAR (LOADING A)	
114	* 4-943-996-01	SPRING, LEAF	
115	* 1-638-730-11	LOADING MOTOR BOARD	
116	* 4-363-146-21	HEAT SINK, V.OUT	
117	1-535-892-11	JUMPER, FILM (WITH TERMINAL)	
118	* 1-638-731-11	OPEN/UP SW BOARD	
119	* 4-944-178-01	SHEET (INSULATING)	
120	3-531-576-11	RIVET	
121	* 4-934-373-01	BRACKET (BU)	
122	4-933-134-01	SCREW (+PTPWH M2.6X6)	
123	* 4-944-581-01	PLATE, GROUND	
M702	A-4604-834-A	MOTOR ASSY, LOADING	
Q203	8-729-111-67	TRANSISTOR 2SB1274-RS	
S701	1-572-713-11	SWITCH, PUSH (WITH CONNECTOR) (DOWN)	
T901	⚠. 1-449-954-11	TRANSFORMER, POWER (US, CND)	
T901	⚠. 1-449-955-11	TRANSFORMER, POWER (AEP, AUS)	
T901	⚠. 1-449-956-11	TRANSFORMER, POWER (E)	

4-4. OPTICAL PICK-UP BLOCK (BU-5BD3)



Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Note : Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
151	4-917-565-01	SHAFT, SLED	
152	4-933-126-01	INSULATOR (A)	
153 *	A-4617-371-A	BD BOARD, COMPLETE	
154	4-917-567-01	GEAR (M)	
155	4-917-564-01	GEAR (P), FLATNESS	

Ref. No.	Part No.	Description	Remark
156 ⚠	8-848-144-11	DEVICE, OPTICAL KSS-240A	
157	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
M101	X-4917-504-1	MOTOR, ASSY, SLED	
M102	X-4917-523-3	MOTOR ASSY, SPINDLE	
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	

SECTION 5
ELECTRICAL PARTS LIST

BD

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "＊" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS
  uF : μF
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal Oxide-film resistor
  F : nonflammable
- COILS
  uH : μH
- SEMICONDUCTORS
  In each case, u : μ, for example :
  uA. . . : μA. . ., uPA. . . : μPA. . .,
  uPB. . . : μPB. . ., uPC. . . : μPC. . .,
  uPD. . . : μPD. . . .
- CND : Canadian model
- AUS : Australian model

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
＊	A-4617-371-A	BD BOARD, COMPLETE			
		******************			
		< CAPACITOR >			
C101	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C102	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C103	1-126-163-11	ELECT	4.7uF	20%	50V
C104	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C105	1-126-154-11	ELECT	47uF	20%	6.3V
C106	1-126-154-11	ELECT	47uF	20%	6.3V
C107	1-126-154-11	ELECT	47uF	20%	6.3V
C108	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C109	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C110	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C111	1-131-367-00	TANTALUM	22uF	10%	20V
C112	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C113	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C114	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C115	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C117	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C118	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C119	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C120	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C151	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C152	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C153	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C154	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C155	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V
C171	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C172	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C173	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C174	1-163-038-00	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN101	1-568-796-11	SOCKET, CONNECTOR 22P			
CN102	1-568-795-11	SOCKET, CONNECTOR 12P			
		< IC >			
IC101	8-752-050-82	IC CXA1372Q			
IC102	8-759-821-94	IC LA6532M			
		< JUMPER >			
J101	1-216-295-00	METAL CHIP	0	5%	1/10W
J102	1-216-295-00	METAL CHIP	0	5%	1/10W
		< TRANSISTOR >			
Q101	8-729-901-01	TRANSISTOR DTC144EK			
		< RESISTOR >			
R101	1-216-097-00	METAL CHIP	100K	5%	1/10W
R102	1-216-095-00	METAL CHIP	82K	5%	1/10W
R103	1-216-091-00	METAL CHIP	56K	5%	1/10W
R104	1-216-099-00	METAL CHIP	120K	5%	1/10W
R105	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R106	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R107	1-216-114-00	METAL GLAZE	510K	5%	1/10W
R108	1-216-105-00	METAL CHIP	220K	5%	1/10W
R109	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R110	1-216-049-00	METAL CHIP	1K	5%	1/10W
R111	1-216-049-00	METAL CHIP	1K	5%	1/10W
R112	1-216-083-00	METAL CHIP	27K	5%	1/10W
R113	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R114	1-216-105-00	METAL CHIP	220K	5%	1/10W
R152	1-216-073-00	METAL CHIP	10K	5%	1/10W
R153	1-216-085-00	METAL CHIP	33K	5%	1/10W

BD MAIN, DISPLAY, KEY

Ref. No.	Part No.	Description			Remark
R154	1-216-085-00	METAL CHIP	33K	5%	1/10W
R155	1-216-093-00	METAL CHIP	68K	5%	1/10W
R156	1-216-081-00	METAL CHIP	22K	5%	1/10W
R157	1-216-079-00	METAL CHIP	18K	5%	1/10W
R158	1-216-079-00	METAL CHIP	18K	5%	1/10W
R159	1-216-079-00	METAL CHIP	18K	5%	1/10W
R160	1-216-049-00	METAL CHIP	1K	5%	1/10W
R171	1-216-001-00	METAL CHIP	10	5%	1/10W
R172	1-216-001-00	METAL CHIP	10	5%	1/10W
R173	1-216-001-00	METAL CHIP	10	5%	1/10W
R174	1-216-001-00	METAL CHIP	10	5%	1/10W

< VARIABLE RESISTOR >

Ref. No.	Part No.	Description
RV101	1-238-016-11	RES, ADJ, CARBON 10K
RV102	1-238-016-11	RES, ADJ, CARBON 10K

< SWITCH >

Ref. No.	Part No.	Description
S101	1-572-085-11	SWITCH, LEAF (LIMIT)

****

* A-4617-854-A MAIN BOARD, COMPLETE(AEP,AUS)
****
* A-4617-888-A MAIN BOARD, COMPLETE(US,CND)
****
* A-4617-857-A MAIN BOARD, COMPLETE(E)
****
* 1-639-338-11 DISPLAY BOARD
****
* 1-639-339-11 KEY BOARD
****

* 4-363-146-21 HEAT SINK, V.OUT
7-682-548-09 SCREW +BVTT 3X8 (S)

< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C201	1-124-572-11	ELECT	100uF	20%	63V
C202	1-126-059-11	ELECT	10uF	20%	50V
C203	1-126-937-11	ELECT	4700uF	20%	16V
C204	1-126-017-11	ELECT	6800uF	20%	16V
C205	1-126-163-11	ELECT	4.7uF	20%	50V
C206	1-126-059-11	ELECT	10uF	20%	50V
C207	1-126-059-11	ELECT	10uF	20%	50V
C208	1-124-997-11	ELECT	470uF	20%	10V
C209	1-124-997-11	ELECT	470uF	20%	10V
C210	1-126-024-11	ELECT	220uF	20%	16V
C211	1-124-893-11	ELECT	2200uF	20%	10V
C212	1-124-997-11	ELECT	470uF	20%	10V
C213	1-164-159-11	CERAMIC	0.1uF		50V
C221	1-164-159-11	CERAMIC	0.1uF		50V
C301	1-126-022-11	ELECT	47uF	20%	16V
C302	1-164-159-11	CERAMIC	0.1uF		50V
C303	1-164-159-11	CERAMIC	0.1uF		50V
C304	1-164-159-11	CERAMIC	0.1uF		50V
C305	1-164-159-11	CERAMIC	0.1uF		50V
		(Board Suffix-11)			
C311	1-136-161-00	FILM	0.047uF	5%	50V
C312	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C313	1-161-494-00	CERAMIC	0.022uF		25V
C314	1-162-306-11	CERAMIC	0.01uF	20%	16V
C315	1-126-300-11	ELECT	0.47uF	20%	50V
C316	1-161-494-00	CERAMIC	0.022uF		25V
C320	1-164-159-11	CERAMIC	0.1uF		50V
C321	1-164-159-11	CERAMIC	0.1uF		50V
C331	1-162-208-31	CERAMIC	24PF	5%	50V
C336	1-126-022-11	ELECT	47uF	20%	16V
C342	1-126-022-11	ELECT	47uF	20%	16V
C343	1-161-494-00	CERAMIC	0.022uF		25V
C349	1-161-494-00	CERAMIC	0.022uF		25V
C350	1-126-022-11	ELECT	47uF	20%	16V
C351	1-161-494-00	CERAMIC	0.022uF		25V
C353	1-162-196-31	CERAMIC	5.6PF	10%	50V
C354	1-162-196-31	CERAMIC	5.6PF	10%	50V
C355	1-161-494-00	CERAMIC	0.022uF		25V
C356	1-126-022-11	ELECT	47uF	20%	16V
C357	1-124-997-11	ELECT	470uF	20%	10V
C361	1-162-286-31	CERAMIC	220PF	10%	50V
		(Board Suffix-11)			
C362	1-162-286-31	CERAMIC	220PF	10%	50V
		(Board Suffix-11)			
C362	1-162-289-31	CERAMIC	390PF	10%	50V
		(Board Suffix-13)			
C363	1-162-285-31	CERAMIC	180PF	10%	50V
C364	1-162-285-31	CERAMIC	180PF	10%	50V
C365	1-162-285-31	CERAMIC	180PF	10%	50V
C366	1-162-285-31	CERAMIC	180PF	10%	50V
C367	1-162-286-31	CERAMIC	220PF	10%	50V
		(Board Suffix-11)			
C368	1-162-286-31	CERAMIC	220PF	10%	50V
		(Board Suffix-11)			
C368	1-162-289-31	CERAMIC	390PF	10%	50V
		(Board Suffix-13)			
C371	1-130-479-00	MYLAR	0.0047uF	5%	50V
C372	1-130-479-00	MYLAR	0.0047uF	5%	50V
C373	1-130-472-00	MYLAR	0.0012uF	5%	50V
C374	1-130-472-00	MYLAR	0.0012uF	5%	50V
C375	1-126-024-11	ELECT	220uF	20%	16V
C376	1-126-024-11	ELECT	220uF	20%	16V
C377	1-126-022-11	ELECT	47uF	20%	16V
C378	1-126-022-11	ELECT	47uF	20%	16V

MAIN, DISPLAY, KEY

Ref. No.	Part No.	Description			Remark
C379	1-130-474-00	MYLAR	0.0018uF	5%	50V
		(Board Suffix-11)			
C379	1-130-473-00	MYLAR	0.0015uF	5%	50V
		(Board Suffix-13)			
C380	1-130-474-00	MYLAR	0.0018uF	5%	50V
		(Board Suffix-11)			
C380	1-130-473-00	MYLAR	0.0015uF	5%	50V
		(Board Suffix-13)			
C401	1-126-022-11	ELECT	47uF	20%	16V
C402	1-161-494-00	CERAMIC	0.022uF		25V
C403	1-126-023-11	ELECT	100uF	20%	16V
C404	1-126-023-11	ELECT	100uF	20%	16V
C405	1-162-294-31	CERAMIC	0.001uF	10%	50V
C406	1-162-294-31	CERAMIC	0.001uF	10%	50V
C408	1-164-159-11	CERAMIC	0.1uF		50V
C409	1-164-159-11	CERAMIC	0.1uF		50V
C414	1-164-159-11	CERAMIC	0.1uF		50V
C551	1-161-494-00	CERAMIC	0.022uF		25V
		< CONNECTOR >			
CN301	* 1-573-046-11	SOCKET, CONNECTOR 18P			
CN401	* 1-573-045-11	SOCKET, CONNECTOR 30P			
CN402	* 1-568-948-11	PIN, CONNECTOR 10P			
CN403	* 1-568-824-11	SOCKET, CONNECTOR 5P			
CN404	* 1-568-943-11	PIN, CONNECTOR 5P			
CN551	* 1-568-933-11	SOCKET, CONNECTOR 30P			
CN901	* 1-573-047-11	PIN, CONNECTOR			
		< DIODE >			
D201	8-719-200-82	DIODE	11ES2		
D202	8-719-109-97	DIODE	RD6.8ES-B2		
D203	8-719-200-82	DIODE	11ES2		
D204	8-719-200-82	DIODE	11ES2		
D205	8-719-200-82	DIODE	11ES2		
D206	8-719-200-82	DIODE	11ES2		
D208	8-719-109-89	DIODE	RD5.6ES-B2		
D209	8-719-912-20	DIODE	1SS120		
D341	8-719-210-21	DIODE	11EQS04		
D351	8-719-912-20	DIODE	1SS120		
		< INDICATOR >			
FL551	1-519-655-11	FLUORESCENT INDICATOR			
		< IC >			
IC201	8-759-633-42	IC	M5293L		
IC202	8-759-630-21	IC	M5290P-16		
IC203	8-759-945-58	IC	RC4558P		
IC204	8-759-604-86	IC	M5F7807L		
IC301	8-752-337-26	IC	CXD2500AQ		
IC302	8-752-342-65	IC	CXD2560M		
IC303	8-752-343-01	IC	CXD2561M		
IC306	8-759-990-82	IC	TL082CP		
IC307	8-759-945-58	IC	RC4558P		
IC401	8-752-817-42	IC	CXP50116-213Q		
IC402	8-752-035-28	IC	CXD1291P		
IC551	8-741-100-48	IC	SBX1610-59		
		< JACK >			
J381	1-569-442-11	JACK, PIN 2P (LINE OUT)			
		< COIL >			
L331	1-408-403-00	INDUCTOR	3.3uH		
L332	1-412-473-21	INDUCTOR (Board Suffix-13)			
		< IC LINC >			
PS201	⚠. 1-532-685-00	LINK, IC (AEP, AUS)			
PS202	⚠. 1-532-637-00	LINK, IC	1.0A (AEP, AUS)		
		< TRANSISTOR >			
Q201	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q202	8-729-140-96	TRANSISTOR	2SD774-34		
Q203	8-729-111-67	TRANSISTOR	2SB1094-L		
Q204	8-729-900-65	TRANSISTOR	DTA144ES		
Q205	8-729-900-89	TRANSISTOR	DTC144ES		
Q206	8-729-900-89	TRANSISTOR	DTC144ES		
Q209	8-729-281-52	TRANSISTOR	2SC1815-Y		
Q341	8-729-900-65	TRANSISTOR	DTA144ES		
Q342	8-729-900-65	TRANSISTOR	DTA144ES		
Q343	8-729-900-65	TRANSISTOR	DTA144ES		
Q344	8-729-900-89	TRANSISTOR	DTC144ES		
Q371	8-729-141-30	TRANSISTOR	2SC3623A-LK		
Q372	8-729-141-30	TRANSISTOR	2SC3623A-LK		
Q373	8-729-141-30	TRANSISTOR	2SC3623A-LK		
Q374	8-729-141-30	TRANSISTOR	2SC3623A-LK		
Q375	8-729-231-55	TRANSISTOR	2SC2878-AB		
Q376	8-729-231-55	TRANSISTOR	2SC2878-AB		
Q401	8-729-900-89	TRANSISTOR	DTC144ES		
		< RESISTOR >			
R201	1-249-435-11	CARBON	33K	5%	1/4W
R202	1-249-438-11	CARBON	56K	5%	1/4W
R203	1-249-429-11	CARBON	10K	5%	1/4W
R204	1-249-425-11	CARBON	4.7K	5%	1/4W
R205	1-249-425-11	CARBON	4.7K	5%	1/4W
R208	1-249-423-11	CARBON	3.3K	5%	1/4W
R209	1-249-413-11	CARBON	470	5%	1/4W
R210	1-249-429-11	CARBON	10K	5%	1/4W

Note :	**Note :**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MAIN, DISPLAY, KEY

Ref. No.	Part No.	Description			Remark
R211	1-249-410-11	CARBON	270	5%	1/4W
R212	1-249-392-11	CARBON	8.2	5%	1/4W
R213	1-249-392-11	CARBON	8.2	5%	1/4W
R214	1-249-417-11	CARBON	1K	5%	1/4W
R301	1-249-411-11	CARBON	330	5%	1/4W
		(Board Suffix-11)			
R301	1-249-417-11	CARBON	1K	5%	1/4W
		(Board Suffix-13)			
R302	1-249-417-11	CARBON	1K	5%	1/4W
R303	1-249-417-11	CARBON	1K	5%	1/4W
R311	1-249-423-11	CARBON	3.3K	5%	1/4W
R312	1-249-429-11	CARBON	10K	5%	1/4W
R313	1-249-423-11	CARBON	3.3K	5%	1/4W
R314	1-249-429-11	CARBON	10K	5%	1/4W
R315	1-249-417-11	CARBON	1K	5%	1/4W
R316	1-249-417-11	CARBON	1K	5%	1/4W
R317	1-249-420-11	CARBON	1.8K	5%	1/4W
R318	1-249-441-11	CARBON	100K	5%	1/4W
R321	1-249-417-11	CARBON	1K	5%	1/4W
R322	1-249-417-11	CARBON	1K	5%	1/4W
R323	1-249-417-11	CARBON	1K	5%	1/4W
R324	1-249-417-11	CARBON	1K	5%	1/4W
R330	1-249-417-11	CARBON	1K	5%	1/4W
R331	1-249-417-11	CARBON	1K	5%	1/4W
R341	1-249-393-11	CARBON	10	5%	1/4W
R342	1-249-417-11	CARBON	1K	5%	1/4W
R343	1-249-441-11	CARBON	100K	5%	1/4W
R344	1-249-441-11	CARBON	100K	5%	1/4W
R345	1-249-425-11	CARBON	4.7K	5%	1/4W
R346	1-249-425-11	CARBON	4.7K	5%	1/4W
R347	1-249-441-11	CARBON	100K	5%	1/4W
R348	1-249-429-11	CARBON	10K	5%	1/4W
R351	1-249-428-11	CARBON	8.2K	5%	1/4W
R352	1-249-428-11	CARBON	8.2K	5%	1/4W
R353	1-249-428-11	CARBON	8.2K	5%	1/4W
R354	1-249-428-11	CARBON	8.2K	5%	1/4W
R355	1-249-428-11	CARBON	8.2K	5%	1/4W
R356	1-249-428-11	CARBON	8.2K	5%	1/4W
R357	1-249-428-11	CARBON	8.2K	5%	1/4W
R358	1-249-428-11	CARBON	8.2K	5%	1/4W
R359	1-247-903-00	CARBON	1M	5%	1/4W
R361	1-249-423-11	CARBON	3.3K	5%	1/4W
R362	1-249-423-11	CARBON	3.3K	5%	1/4W
R363	1-249-423-11	CARBON	3.3K	5%	1/4W
R364	1-249-423-11	CARBON	3.3K	5%	1/4W
R365	1-249-430-11	CARBON	12K	5%	1/4W
R366	1-249-430-11	CARBON	12K	5%	1/4W
R367	1-249-430-11	CARBON	12K	5%	1/4W
R368	1-249-430-11	CARBON	12K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R369	1-249-419-11	CARBON	1.5K	5%	1/4W
R370	1-249-419-11	CARBON	1.5K	5%	1/4W
R371	1-249-419-11	CARBON	1.5K	5%	1/4W
R372	1-249-419-11	CARBON	1.5K	5%	1/4W
R373	1-247-887-00	CARBON	220K	5%	1/4W
R374	1-247-887-00	CARBON	220K	5%	1/4W
R375	1-249-409-11	CARBON	220	5%	1/4W
R376	1-249-409-11	CARBON	220	5%	1/4W
R377	1-249-409-11	CARBON	220	5%	1/4W
R378	1-249-409-11	CARBON	220	5%	1/4W
R379	1-249-425-11	CARBON	4.7K	5%	1/4W
R380	1-249-425-11	CARBON	4.7K	5%	1/4W
R381	1-249-425-11	CARBON	4.7K	5%	1/4W
R382	1-249-425-11	CARBON	4.7K	5%	1/4W
R383	1-249-414-11	CARBON	560	5%	1/4W
R384	1-249-414-11	CARBON	560	5%	1/4W
R385	1-249-393-11	CARBON	10	5%	1/4W
R386	1-249-393-11	CARBON	10	5%	1/4W
R401	1-249-433-11	CARBON	22K	5%	1/4W
R402	1-249-433-11	CARBON	22K	5%	1/4W
R403	1-249-433-11	CARBON	22K	5%	1/4W
R404	1-249-425-11	CARBON	4.7K	5%	1/4W
R405	1-249-425-11	CARBON	4.7K	5%	1/4W
R406	1-249-425-11	CARBON	4.7K	5%	1/4W
R408	1-249-441-11	CARBON	100K	5%	1/4W
R409	1-247-864-11	CARBON	24K	5%	1/4W
R410	1-247-880-11	CARBON	110K	5%	1/4W
R411	1-249-440-11	CARBON	82K	5%	1/4W
R412	1-247-876-11	CARBON	75K	5%	1/4W
R413	1-249-440-11	CARBON	82K	5%	1/4W
R414	1-247-874-11	CARBON	62K	5%	1/4W
R415	1-249-435-11	CARBON	33K	5%	1/4W
R416	1-247-878-00	CARBON	91K	5%	1/4W
R421	1-249-393-11	CARBON	10	5%	1/4W
R422	1-249-393-11	CARBON	10	5%	1/4W
R501	1-249-422-11	CARBON	2.7K	5%	1/4W
R502	1-249-424-11	CARBON	3.9K	5%	1/4W
R503	1-249-427-11	CARBON	6.8K	5%	1/4W
R504	1-249-432-11	CARBON	18K	5%	1/4W
R505	1-249-422-11	CARBON	2.7K	5%	1/4W
R506	1-249-424-11	CARBON	3.9K	5%	1/4W
R507	1-249-427-11	CARBON	6.8K	5%	1/4W
R508	1-249-432-11	CARBON	18K	5%	1/4W
R509	1-249-422-11	CARBON	2.7K	5%	1/4W
R510	1-249-424-11	CARBON	3.9K	5%	1/4W
R511	1-249-427-11	CARBON	6.8K	5%	1/4W
R512	1-249-432-11	CARBON	18K	5%	1/4W
R513	1-249-422-11	CARBON	2.7K	5%	1/4W
R514	1-249-424-11	CARBON	3.9K	5%	1/4W

MAIN, DISPLAY, KEY

Ref. No.	Part No.	Description	Remark
R515	1-249-427-11	CARBON 6.8K 5% 1/4W	
R516	1-249-432-11	CARBON 18K 5% 1/4W	
R551	1-249-422-11	CARBON 2.7K 5% 1/4W	
R552	1-249-424-11	CARBON 3.9K 5% 1/4W	
R553	1-249-429-11	CARBON 10K 5% 1/4W	
R554	1-249-429-11	CARBON 10K 5% 1/4W	
R555	1-249-429-11	CARBON 10K 5% 1/4W	
R556	1-249-429-11	CARBON 10K 5% 1/4W	
R557	1-249-429-11	CARBON 10K 5% 1/4W	
		< SWITCH >	
S501	1-554-303-21	SWITCH, TACTILE (⏮)	
S502	1-554-303-21	SWITCH, TACTILE (⏭)	
S503	1-554-303-21	SWITCH, TACTILE (■)	
S504	1-554-303-21	SWITCH, TACTILE (OPEN/CLOSE)	
S505	1-554-303-21	SWITCH, TACTILE (DISK SKIP)	
S506	1-554-303-21	SWITCH, TACTILE (DISC 1)	
S507	1-554-303-21	SWITCH, TACTILE (DISC 2)	
S508	1-554-303-21	SWITCH, TACTILE (DISC 3)	
S509	1-554-303-21	SWITCH, TACTILE (DISC 4)	
S510	1-554-303-21	SWITCH, TACTILE (DISC 5)	
S511	1-554-303-21	SWITCH, TACTILE (EDIT)	
S512	1-554-303-21	SWITCH, TACTILE (◀◀)	
S513	1-554-303-21	SWITCH, TACTILE (▶▶)	
S514	1-554-303-21	SWITCH, TACTILE (▷)	
S515	1-554-303-21	SWITCH, TACTILE (▯▯)	
S516	1-554-303-21	SWITCH, TACTILE (CONTINUE)	
S517	1-554-303-21	SWITCH, TACTILE (SHUFFLE)	
S518	1-554-303-21	SWITCH, TACTILE (PROGRAM)	
S519	1-554-303-21	SWITCH, TACTILE (PEAK SEARCH)	
S520	1-554-303-21	SWITCH, TACTILE (MUSIC SCAN)	
S521	1-572-714-11	SWITCH, PUSH (POWER)	
S551	1-554-303-21	SWITCH, TACTILE (TIMER)	
S552	1-554-303-21	SWITCH, TACTILE (REPEAT)	
S553	1-554-303-21	SWITCH, TACTILE (FADER)	
S554	1-570-157-51	SWITCH, SLIDE (TIMER)	
S901	⚠. 1-571-722-11	SWITCH, VOLTAGE SELECTOR (E)	
		< CRYSTAL >	
X351	1-567-965-11	VIBRATOR, CRYSTAL (22.5MHz)	

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TABLE MOTOR, LOADING MOTOR, OPEN/UP SW

Ref. No.	Part No.	Description	Remark
	* 1-638-729-11	TABLE MOTOR BOARD *****************	
	* 1-638-730-11	LOADING MOTOR BOARD *******************	
	* 1-638-731-11	OPEN/UP SW BOARD ****************	
		< CAPACITOR >	
C704	1-161-375-00	CERAMIC 0.0022uF 20% 50V	
C705	1-161-375-00	CERAMIC 0.0022uF 20% 50V	
		< CONNECTOR >	
CN705	* 1-566-214-11	PIN, CONNECTOR (PC BOARD) 2P	
CN707	* 1-573-044-11	SOCKET, CONNECTOR	
		< DIODE >	
D701	8-719-970-19	DIODE GP-1A521	
		< RESISTOR >	
R701	1-249-416-11	CARBON 820 5% 1/4W	
		< SWITCH >	
S702	1-571-300-21	SWITCH, ROTARY (OPEN/UP)	

****

MISCELLANEOUS
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Ref. No.	Part No.	Description	Remark
9	1-590-905-11	WIRE, FLAT TYPE (30 CORE)	
15	⚠. 1-575-651-21	CORD, POWER (AEP)	
18	⚠. 1-575-653-21	CORD, POWER (E)	
18	⚠. 1-590-836-11	CORD, POWER (US, CND)	
21	⚠. 1-574-358-31	CORD, POWER (WITH CONNECTOR) (AUS)	
59	1-452-340-21	MAGNET	
62	1-590-849-11	WIRE, FLAT TYPE (5 CORE)	
117	1-535-892-11	JUMPER, FILM (WITH TERMINAL)	
156	⚠. 8-848-144-11	DEVICE, OPTICAL KSS-240A	
157	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
M101	X-4917-504-1	MOTOR, ASSY, SLED	
M102	X-4917-523-3	MOTOR ASSY, SPINDLE	
M701	A-4604-585-A	MOTOR ASSY, ROTARY	
M702	A-4604-834-A	MOTOR ASSY, LOADING	
S701	1-572-713-11	SWITCH, PUSH (WITH CONNECTOR) (DOWN)	
T901	⚠. 1-449-954-11	TRANSFORMER, POWER (US, CND)	
T901	⚠. 1-449-955-11	TRANSFORMER, POWER (AEP, AUS)	
T901	⚠. 1-449-956-11	TRANSFORMER, POWER (E)	

****

Note :	**Note :**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		ACCESSORY & PACKING MATERIAL ***************************	
	3-753-030-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (CND)	
	3-753-030-21	MANUAL, INSTRUCTION (ENGLISH) (US, AUS)	
	3-753-030-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP)	
	* 4-944-039-11	INDIVIDUAL CARTON (EXCEPT E)	
	* 4-944-040-01	CUSHION (FRONT)	
	* 4-944-041-01	CUSHION (REAR)	

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HARDWARE LIST

# 1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S
# 2	7-682-554-04	SCREW +B 3X25
# 3	7-685-648-79	SCREW (M3X12), TAPPING
# 4	7-685-136-19	SCREW +P 2.6X12 TYPE2 NON-SLIT
# 5	7-682-548-09	SCREW +BVTT 3X8 (S)
# 6	7-621-255-15	SCREW +P 2X3
# 7	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S

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